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CATALOGUE

OF

LEPIDOPTERA HETEROCERA.

PART IV.

Fam. 3. LIPARIDÆ.

Habitus nonnunquam geometriformis. Proboscis brevissima, aut obsoleta, nonnunquam brevis, rarissime longa. Antennæ capitis latitudine multo longiores. Alæ anticæ aliter venosæ et infrenatæ, necnon majores ac posteriores; vena marginis interioris unica; frenulum conspicuum. Vena costalis alarum posticarum e basi. *Fœmina* rarissime aptera. Larva libera, pigra, sæpius arboricola, pilis fasciculato tuberculatis vestita, tuberculo 1o laterali, alteris magis producto, longius piloso; dorso postico vesiculis duabus retractilibus prædito. Pupa laxe foliculata, pilis fasciculatis sæpius adspersa.

Liparides, *Boisd. Gen. et Ind. Méth.* 66. *Herr.-Schæff.*
Liparidi, p., *Steph. Cat. Brit. Lep.* 49.

Synopsis of Genera.

A. Fœmina *aptera.*
  A. Corpus maris *gracile.* - - - - 1. ORGYIA.
  B. Corpus maris *crassum.* - - - - 2. OXICESTA.
B. Fœminæ *alæ incompletæ.* - - - 3. PENTHOPHERA.
C. Fœmina *alata.*
  A. Tibiæ posticæ bicalcaratæ.
    a. Tibiæ posticæ calcaribus longis.

a. Alæ posticæ abdomen longe superantes. - 30. PANTANA.
b. Alæ posticæ abdomen superantes.
i. Antennæ *maris* latissime pectinatæ. 59. PTEROLOCERA.
ii. Antennæ *maris* subpectinatæ. - - 47. ANTHELA.
c. Alæ posticæ abdomen non superantes.
i. Alæ latæ.
* Palpi caput superantes. - - - 17. ANTIPHA.
** Palpi caput vix superantes.
† Pedes validi. - - - - 44. TEARA.
†† Pedes graciles. - - - - 61. NISAGA.
ii. Alæ angustæ. - - - - 15. AMSACTA.
†† Pedes graciles. - - - - 9. ACYPHAS.
B. Tibiæ posticæ calcaribus mediocriter longis.
a. Antennæ *maris* vix late pectinatæ. - 50. ANAPHE.
b. Antennæ *maris* late pectinatæ.
i. Abdomen alas posticas superans. - 57. SOMERA.
ii. Abdomen alas posticas non aut vix superans.
*** Palpi caput longe superantes. - - 23. ARGILA.
**** Palpi caput superantes.
† Corpus gracillimum. - - 31. PENORA.
†† Corpus sat validum aut crassum. - 61. DARALA.
***** Palpi caput non superantes.
† Alæ latæ. - - - - - - 33. OLAPA.
†† Alæ sat angustæ. - - - 14. TEIA
c. Tibiæ posticæ calcaribus parvis.
a. Corpus crassum.
i. Thoracis latera non cristata.
* Abdomen *fœminæ* non dense lanuginosum.
† Proboscis brevis.
‡ Pedes sat validi.
§ Alarum posticarum vena 3a inferior 2a proxima.
× Abdomen alas posticas non superans.
+ Alæ vix vestitæ. - 41. STILPNOTIA.
++ Alæ dense vestitæ.
0 Alæ vix latæ. - - 49. SINAGA.
00 Alæ amplæ. - - 62. DREATA.
×× Abdomen alas posticas longe superans. 67. APISA.
§§ Alarum posticarum vena 3a inferior 4a proxima. - - - - 48. SITINA.
‡‡ Pedes gracillimi. - - 54. MESERA.
†† Proboscis sat longa. - - - 46. NIGASA.
** Abdomen *fœminæ* dense lanuginosum. 43. TRICHETRA.
i. Thoracis latera cristata. - - - 42. CARAMA.

b. Corpus sat gracile.
i. Abdomen alas posticas superans. - 66. GYARA.
ii. Abdomen alas posticas paullo superans. 45. BERALADE.
iii. Abdomen alas posticas vix superans. 65. COBORISA.
iv. Alæ posticæ abdomen longe superans. - 58. ENOME.
c. Corpus gracillimum.
i. Palpi brevissimi. - - - - - 28. CIMOLA.
ii. Palpi breves. - - - - - 35. CAVIRIA.
iii. Palpi mediocriter longi.
* Palporum articulus 3us longiusculus. 26. ELORIA.
** Palporum articulus 3us brevissimus. 24. CROREMA.

B. Tibiæ posticæ quadricalcaratæ.
A. Palpi longi aut longiusculi.
a. Corpus validum aut sat validum.
i. Tibiæ posticæ calcaribus longis.
* Alæ anticæ apice angulatæ. - - 37. REDOA.
** Alæ anticæ apice rotundatæ. - - 38. LÆLIA.
ii. Tibiæ posticæ calcaribus sat longis.
* Abdomen *fœminæ* non acuminatum.
† Alæ posticæ non angulatæ. - 55. DASYCHIRA.
†† Alæ posticæ angulatæ. - - 64. MEGETHNA.
** Abdomen *fœminæ* acuminatum. - 53. MORASA.
iii. Tibiæ posticæ calcaribus parvis. - 56. LYMANTRIA.
b. Corpus gracile aut sat gracile.
i. Alæ vix latæ. - - - - - 25. PROCODECA.
ii. Alæ latiusculæ.
* Palporum articulus 3us lanceolatus. - 4. OCNERIA.
** Palporum articulus 3us conicus.
† Abdomen alas posticas paullo superans. 21. DULICHIA.
†† Abdomen alas posticas non superans.
‡ Antennæ breviusculæ. - - 22. ANAXILA.
‡‡ Antennæ longiusculæ. - - - 13. LACIDA.
iii. Alæ latæ.
* Abdomen alas posticas non superans.
† Antennæ *maris* subpectinatæ. - 36. CROPERA.
†† Antennæ *maris* late pectinatæ. - 51. CISPIA.
††† Antennæ *maris* latissime pectinatæ.
‡ Antennæ graciles. - - - 10. REPENA.
‡ Antennæ robustæ. - - - 11. SARSINA.
** Abdomen alas posticas superans. - 19. MARCIPA.
c. Corpus gracillimum.

i. Alæ dense vestitæ. - - - 12. ANTHORA.
ii. Alæ vix vestitæ. - - - - 29. GENUSA.
iii. Alæ nudæ. - - - - - - 32. DEROCA.
B. Palpi breves.
a. Corpus sat validum.
i. Antennæ *maris* latissime pectinatæ.
* Alæ posticæ abdomen superantes. - - 63. JANA.
** Alæ posticæ abdomen non superantes.
† Alæ dense vestitæ. - - - 8. CHARNIDA.
‡ Abdomen non lanuginosum.
‡‡ Abdomen lanuginosum. - - 40. EUPROCTIS.
†† Alæ parum vestitæ.
‡ Alæ vix latæ. - - - - 39. LEUCOMA.
‡‡ Alæ latissime.
ii. Antennæ *maris* simplices.
b. Corpus sat gracile.
i. Alæ anticæ latæ. - - - - 52. POLOMA.
ii. Alæ anticæ sat angustæ. - - - 34. RICINE.
c. Corpus gracile aut gracillimum.
i. Antennæ *maris* breviter pectinatæ. - 18. ACRAGA.
ii. Antennæ *maris* mediocriter pectinatæ. - 20. MELIA.
iii. Antennæ *maris* late aut latissime pectinatæ.
* Palpi breves.
† Corpus gracile.
‡ Alæ latæ.
§ Tibiæ nudæ. - - - - 6. AROA.
§§ Tibiæ pilosæ. - - - 7. ARTAXA.
‡‡ Alæ sat angustæ. - - - 16. ARESTHA.
†† Corpus gracillimum.
‡ Alæ vix vestitæ. - - - 27. CYPRA.
‡‡ Alæ dense vestitæ. - - - 5. LACIPA.

Genus 1. ORGYIA.

Mas. Corpus gracile. Proboscis brevissima. Palpi breves, validi, pilosissimi; articulus 3us minimus. Antennæ latissime pectinatæ. Pedes graciles; tibiæ posticæ calcaribus duobus breviusculis apicalibus, aut quatuor sat longis. Alæ latæ; posticæ abdomen superantes. *Fœminæ.*—Sæpissime apteræ. Larva elongata, tuberculata, setosim pilosa, scopulis dorsalibus penicillisque antennæ—et caudæformibus ornata. Pupa folliculata.

Orgyia, *Ochs. Schmett. von Eur.; Meigen; Ahrens; Steph. Ill. Brit. Ent. Haust.* ii. 60; *Herr.-Schæff.*

Phalæna Bombyx, p., *Linn.*; *Berk.*; *Don.*; *Stew.*; *Turt.*
Laria, p., *Schr.*
Dasychira, p., *Hübn.*
Gynæphora, *Hübn.*
Epicoma, *Hübn.*

Male. Body slender. Proboscis very short. Palpi short, stout, very hairy; third joint very small. Antennæ very deeply pectinated. Legs slender; hind tibiæ with two rather short apical spurs, or with four moderately long spurs. Wings broad. Fore wings with the first, second and third inferior veins near together; fourth remote from them. Hind wings extending beyond the abdomen.

O. leucostigma and *O. bicolor* have four spurs on the hind tibiæ, and ought perhaps to be separated from this genus.

Europe.

A. Ciliæ flavæ.
  A. Nigro-fusca, solum ciliis flavis. - - aurolimbata, *Vill.*
  B. Alæ anticæ fuscæ, flavo signatæ.
    a. Alæ anticæ maculis laceratis et ciliis aurantiacis. splendida, *Ramb.*
    b. Alæ anticæ ciliis, strigis ambabus et ambitu maculæ mediæ stramineis. - - - - - - dubia, *Hübn.*
B. Ciliæ obscuræ, innotatæ.
  A. Alæ anticæ macula centrali nulla.
    a. Aurantiaca. - - - - - - Alhagi, *Fischer.*
    b. Ferrugineo-fusca.
      a. Alæ anticæ macula obsoleta pallida in medio, marginis anterioris. - - - - - - Ericæ, *Germ.*
      b. Alæ anticæ lineis duabus transversis albis. rupestris, *Ramb.*
    c. Nigro-fusca. - - - - - trigotephras, *Lefebvre.*
  B. Alæ anticæ maculæ centrali nigri tenui albido-cincta. corsica, *Boisd.*
C. Ciliæ fuscæ, in venis pallidius sectæ.
  A. Alæ ferrugineæ. - - - - - - antiqua, *Linn.*
  B. Alæ fuscæ. - - - - - - gonostigma, *Linn.*

1. Orgyia aurolimbata.

Statura O. antiquæ; *alæ obscure fuscæ, immaculatæ, fimbriis aureis.*

Orgyia aurolimbata, *Guénée et De Villiers, Ann. Soc. Ent. Fr.* iv. 635, 1, pl. 18, C. f. 4. *Graslin, Ann. Soc. Ent. Fr. 2um Sér.* viii. 408, 4, pl. 10, f. 12, larva. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 131, 1.

a. Pyrenees. From Mr. Stevens' collection.

2. ORGYIA SPLENDIDA.

Alæ ciliis flavis, anticæ fuscæ ciliis et maculis laceratis aurantiacis ; posticæ aurantiacæ, limbo late fusco.

Orgyia splendida, *Ramb. Suppl. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 131, 2.

Orgyia dubia, *Var.*?

South Spain.

3. ORGYIA DUBIA.

Alæ aureo-croceæ, anticæ margine lato nigro, fasciis duabus latis nigris transversis, fascia externa ad apicem bifida ; posticæ margine lato nigro apud medium dentato. Fœmina *omnino aptera.*

Bombyx dubia, *Hübn. Bomb.* 261.

Epicoma dubia, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Undatæ*), 160, 1670.

Orgyia Graslin, *Ann. Soc. Ent. Fr.* v. 564, pl. 17, B. f. 4—6. *Tauscher. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 132, 3.

Siena-Nevada.

a. Spain. Presented by Benj. Frend, Esq.
b. Spain. From M. Becker's collection.

3. ORGYIA ERICÆ.

Mas. *Ferrugineo-fusca ; alæ anticæ macula obsoleta pallida in medio marginis anterioris, altera marginis interioris.* Fœm. —*Albida.*

Orgyia Ericæ, *Ahrens, Germar, Faun. Ins. Eur.* 8, 17. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 132, 4. *Speyer, Ent. Zeit. Stett.* xiii. 317, 1.

Oregyia Ericæ, *Meig. Syst. Beschr. Eur. Schmett.* iii. 15, 3, pl. 81, f. 10.

Orgya antiquoides, *Heyer.*

Germany.

Var. α. Alæ totæ ferrugineæ.

Var. β. Alæ anticæ macula parva postica albida.

Var. γ. Alæ anticæ macula mediocri postica duabusque costalibus albis.

a—d. Europe. From M. Becker's collection.

5. Orgyia rupestris.

Statura O. antiquæ; *alæ fusco-ferrugineæ; anticæ strigis tribus obsoletis cinereis, externa in maculam niveam desinente.* Fœmina.—*Aptera, ova in folliculo pariente.*

Orgya rupestris, *Ramb. Ann. Soc. Ent. Fr.* 7, 275, pl. 8, f. 1—5. *Herr. Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text* 132, 6.

Corsica.

6. Orgyia Trigotephras.

Mas. *Omnino nigro-fusca; alæ anticæ supra, fascia latissima nigro-fusca undata transversali nonnunquam incerta; maculis tribus, quarum duæ subcinereæ margine antico annexæ, circuitu variabili; 1a ad medium trigona equilateralis; 2a ad angulum extersum subrotunda; 3a ad angulum internum alba, curva extrinsecus arcuata; alæ posticæ utrinque anticæque subtus penitus immaculatæ, his et illis fimbria immaculata.* Fœmina.—*Minuta, alba, hirta, aptera.*

Orgya Trigotephras, *Lefebvre, Mem. Soc. Linn. Par.* v. 487, pl. 9, f. 4 (O. Ericæ); *Ann. Soc. Ent. Fr.* iii. 187. *Saporta, Ann. Soc. Ent.* 183, pl. 1, C. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text,* 132, 5.

South France.

a, b. Europe. From M. Becker's collection.

7. Orgyia corsica.

Nigro-fusca; alæ anticæ lineis duabus transversis nigris, anteriore semel fracta, basim versus albido-cincta, maculaque alba anguli analis.

Orgya corsica, *Boisd. Icones. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 132, 7.

Corsica.

8. Orgyia antiqua.

Mas. *Alæ ferrugineæ; anticæ strigis duabus obsoletis obscurioribus maculaque anguli analis.* Fœmina.—*Abdomen cinereum.*

Orgyia antiqua, *Ochs. Schmett. von Eur.* iii. 221, 6; iv. 56, 6. *Steph. Ill. Brit. Ent. Haust.* ii. 61, 1.

Phalæna Bombyx antiqua, *Linn. Faun. Suec.* 1120; *Syst. Nat.* ii. 825. *Gmel. ed. Syst. Nat.* i. 5, 2439, 56. *Berk. Syn.* i. 137. *Don. Hist. Nat. Brit. Ins.* i. pl. 16. *Stew. El. Nat. Hist.* ii. 157. *Turt. Syst. Nat.* iii. 226.

Phalæna paradoxa, *Deg. Gen.* 36.

Phalæna gonostigma, *Scop. Ent. Carn.* 199.

Phalæna, &c., *List. Göed.* (Angl.) 80, f. 79; (Lat.) 191, f. 79. *Albin, Nat. Hist. Engl. Ins.* pl. 89, a—e. *Harr. Aur.* pl. 20, f. h—p. *Roes. Ins.* i. pl. 39, f. 1—5; iii. pl. 13, f. 1—4.

Phalæna antiqua, *Wilkes*, 30, pl. 64.

Bombyx antiqua, *Fabr. Ent. Syst.* iii. 1, 476, 216. *Wien. Verz.* 55, G, 5. *Borkh. Schmett.* iii. 331, 125. *Esp. Schmett.* iii. pl. 56, f. 1—5. *Hübn. Bomb.* pl. 20, f. 77; pl. 54, f. 235; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, D, a, f. 1. *God. Pap. de France*, iv. 253, pl. 24, f. 1, 2.

Oregyia antiqua, *Meig. Handb.* 143, 126, 57; *Syst. Beschr. Eur. Schmett.* iii. 15, 2, pl. 81, f. 9.

Bombyx antiqua, *Haw. Lep. Brit.* 132.

Gynæphora antiqua, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Dasychinæ Coloratæ*) 161, 1671.

Orgya antiqua, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 133, 8. *Speyer, Ent. Zeit. Stett.* xiii. 317, 2.

a. England. Presented by Henry Longley, Esq.
b. England. Presented by W. Wing, Esq.
c—x. England. From Mr. Stephens' collection.
y, z. England. From Mr. Foxcroft's collection.
aa—cc. England.
dd, ee. ———? Presented by the Entomological Club.
ff. Europe. From M. Becker's collection.
gg—kk. Nova Scotia. From Lieut. Redman's collection.

9. Orgyia gonostigma.

Mas. *Alæ fuscæ; anticæ macula apicis fulva albo marginata alteraque anguli analis alba.* Fœm.—*Cinerea.*

Orgyia gonostigma, *Ochs. Schmett. von Eur.* iii. 218, 5; iv. 56, 5. *Steph. Ill. Brit. Ent. Haust.* ii. 61, 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 133, 9.

Phalæna Bombyx gonostigma, *Linn. Syst. Nat.* ii. 826. *Gmel. ed. Syst. Nat.* i. 5, 2439, 57. *Berk. Syn.* i. 137. *Don. Nat. Hist. Brit. Ins.* ix. 61, pl. 316. *Stew. El. Nat. Hist.* ii. 157. *Turt. Syst. Nat.* ii. 226.

Phalæna antiqua, *Scop. Ent. Carn.* 198.

——— ———, *Roes. Ins.* i. pl. 40.

——— ———, *List. Göed.* (Angl.) 78, f. 78, 79; (Lat.) 185, 187, f. 78. *Albin, Nat. Hist. Engl. Ins.* pl. 90, f. a—d. *Harr. Aur.* pl. 14, f. a—g.

Phalæna gonostigma, *Wilkes*, 31, pl. 65.

Bombyx gonostigmatus, *Haw. Lep. Brit.* 132.

Bombyx gonostigma, *Fabr. Ent. Syst.* iii. 1, 477, 217. *Wien. Verz.* 58, G, 6. *Borkh. Schmett.* iii. 329, 124. *Esp. Schmett.* iii. pl. 56, f. 6—10. *Hübn. Bomb.* pl. 20, f. 78; pl. 59, f. 253. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, ii. a, f. 2. *God. Pap. de France*, iv. 249, pl. 24, f. 3, 4.

Oregyia gonostigma, *Meig. Handb.* 126, 56; *Syst. Beschr. Eur. Schmett.* iii. 14, 1, pl. 81, f. 11. *Speyer, Ent. Zeit. Stett.* xiii. 317, 3.

Gynæphora recens, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Dasychinæ Coloratæ*) 161, 1672.

a. England (Devonshire). Presented by W. Raddon, Esq.
b—i. England. From Mr. Stephens' collection.
j, k. England.

10. Orgyia Alhagi.

Mas. *Aurantiaca, margine alarum late nigro; alæ anticæ vittis binis incurvis undulatis nigris postice confluentibus.* Fœm.—*Aptera.*

Orgyia Alhagi, *Fischer de Waldheim, Bull. Soc. Imp. Nat. Mosc.* 1839, 1, 117, pl. 4, f. 2.

Sarepta.

North America.

11. Orgyia leucostigma.

Alæ planiusculæ subcinereæ; anticæ strigis lineisque nigris, lunula alba anguli postici. Fœmina.—*Aptera.*

Phalæna leucostigma, *Abbot & Smith, Nat. Hist. Lep. Georgia*, ii. 157, pl. 79.

a—m. Nova Scotia. From Lieut. Redman's collection.

12. Orgyia vetusta.

Alæ anticæ fuscæ, fascia ad basim pallidiore maculaque anali alba; posticæ fusco-rufescentes.

Orgyia vetusta, *Boisd. Ann. Soc. Ent. Fr. 2me Sér.* x. 322, 93.

California.

Africa.

13. Orgyia Dregei.

Fusca; caput, palpi et pedes testacea; alæ ferrugineo-fuscæ, anticæ guttis duabus discalibus nigris.

Orgya Dregei, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 24, f. 114.

Cape.

This species in the above figure is represented with luteous ciliæ.

Male. Brown. Head, palpi and legs testaceous. Antennæ ferruginous above. Wings ferruginous brown. Fore wings with two black dots in a transverse line at the tip of the discal areolet. Length of the body 2½ lines; of the wings 4 lines.

a. South Africa. Presented by Dr. A. Smith.

Asia.

14. Orgyia? plana.

Mas. *Fusca; corpus subtus, palpi et pedes albida; caput apud oculos albidum; palpi supra pallide fusci; alæ gutta discali obscure fusca strigaque testacea; alæ anticæ fascia e guttis obscure fuscis obliqua indistincta subapicali; posticæ obscuriores.*

Male. Brown. Body beneath, palpi and legs whitish. Head whitish about the eyes. Palpi pale brown above. Wings with a dark brown discal dot, which is accompanied by a testaceous streak; fore wings a little paler above than the hind wings, each with an oblique indistinct subapical band of minute dark brown dots; cilia with alternate brown and testaceous bands; under side whitish brown. Length of the body 4½ lines; of the wings 12 lines.

a. North India. From L. James' collection.

15. ORGYIA BICOLOR.

Mas. *Ferrugineo-lutea; antennæ testaceæ; tibiæ posticæ calcaribus quatuor longis; alæ anticæ subtus posticæque obscure fuscæ.*

Male. Rusty luteous. Antennæ testaceous. Wings dark brown, with a whitish fringe. Fore wings above rusty luteous. Length of the body 4 lines; of the wings 10 lines.

a. East Indies. In Mr. Saunders' collection.

16. ORGYIA AUSTRALIS.

Fœm. *Cinerea.*

Female. Cinereous.

Larva. Brownish cinereous, with very long hairs. Head with a tuft of long black capitate hairs on each side.

a, b. New Holland. From Mr. Lambert's collection.

Genus 2. OXICESTA.

Mas. Corpus robustum. Palpi breves, graciles, caput non superantes; articulus 3us acuto-conicus. Antennæ simplices, thorace paullo longiores. Abdomen alas posticas longe superans. Pedes graciles; tibiæ posticæ calcaribus parvis apicalibus. Alæ angustæ.

Oxicesta, *Hübn. Verz. Schmett.* 144.
Clidia, *Boisd. Gen. et Ind. Meth. Eur. Lep.* 68.

Male. Body stout. Palpi short, slender, not extending beyond the head; third joint acute-conical. Antennæ simple, rather longer than the thorax. Abdomen extending some distance beyond the hind wings. Legs slender; hind tibiæ with short apical spurs.

Wings narrow. Fore wings straight along the costa, rounded at the tips, oblique along the exterior border; interior angle rounded; first and second inferior veins approximate; third further from the fourth than from the second.

1. Oxicesta geographia.

Mas. *Cervina; alæ anticæ venis fasciisque duabus angulosis, fimbria fusca interstitiis albis; posticæ fimbria alba.*

Oxicesta geographica, *Hübn. Verz. Schmett.* (*Phalæna Sphingoides Dimorphæ Noctuæformes*) 144, 1530.

Oxicesta sericina, *Hübn. Verz. Schmett.* (*Phalæna Sphingoides Dimorphæ Noctuæformes*) 144, 1529.

a—c. Europe. From M. Becker's collection.

Genus 3. PENTHOPHERA.

Palpi parvi, porrecti, biarticulati; articulus 2us maximus, ovatus, subacutus. Proboscis obsoleta. Antennæ *maris* late bipectinatæ *fœminæ* simplices. Alæ subdiaphanæ, squamis minutis sparsis instructæ, *maris* rotundatæ, *fœminæ* parvæ lunulatæ. Pedes graciles; tibiæ anticæ intus spina armatæ, posteriores apice calcaratæ.

Penthophera, *Germar; Bombyc.* i.
Phalæna Bombyx, p., *Linn.*
Bombyx, p., *Fabr.; Esp.; Hübn.; DeVill.; Petayna; Godart.*

1. Penthophera morio.

Mas. *Fusco-nigra tinctura flavedinis; ciliæ venæque saturatiores; abdomen subtus tarsique argenteo micantia.* Fœm.—*Anus albido lanosus; alæ parvæ.*

Phalæna Bombyx morio? *Linn. Syst. Nat.* ii. 828. *Gmel. ed. Syst. Nat.* i. 5, 2432, 66.

Bombyx morio, *Fabr. Ent. Syst.* iii. 1, 445, 116. *Wien. Verz.* 50, C, 1. *Borkh. Schmett.* iii. 266, 93. *Esp. Schmett.* iii. pl. 43, f. 6, 7. *Hübn. Bomb. Ramb.* pl. 16, f. 57; pl. 54, f. 231, 232. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, B, a, b, f. 1. *God. Pap. de France.*

Penthophera morio, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 133, 10, 1. *Speyer, Ent. Zeit. Stett.* xiii. 319, 18.

Liparis morio, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hypogymniæ Subsquammatæ*) 158, 1644. *Ochs. Schmett.* iii. 187, 1; iv. 55, 1.

Laria morio, *Meig. Syst. Beschr. Eur. Schmett.* iii. 8, 9, pl. 89, f. 1.

a, *b*. Europe. From M. Becker's collection.
c. Europe.

Genus 4. OCNERIA.

Corpus sat gracile. Palpi porrecti, longi, graciles, pilosi, caput superantes; articulus 1us brevis; 3us elongatus, lanceolatus. Pedes gracillimi, fere nudi; tibiæ posticæ calcaribus quatuor longiusculis. *Mas.*—Antennæ latissime pectinatæ. Abdomen alas posticas non superans. Alæ latæ. *Fœm.*—Antennæ subpectinatæ. Abdomen alas posticas paullo superans. Alæ sat angustæ.

Bombyx, p., *Fabr.*; *Borkh.*; *Esp.*; *Hübn.*; *God.*
Phalæna-Bombyx, p., *Gmel.*
Ocneria, *Hübn.*
Liparis, p., *Ochsenh.*
Laria, p., *Meig.*
Penthophora, p., *Steph.*

Body rather slender. Proboscis not visible. Palpi porrect, long, slender, pilose, extending some distance beyond the head; first joint short; third elongate, lanceolate. Legs very slender, almost bare; hind tibiæ with four rather long spurs. Fore wings straight along the costa till near the tips, where they are hardly convex, rounded at the tips, oblique along the exterior border; interior angle rounded; three inferior veins; second about six times further from the third than from the first. *Male.*—Antennæ very deeply pectinated. Abdomen extending as far as the hind wings. Wings broad. *Female.*—Antennæ minutely pectinated. Abdomen extending a little beyond the hind wings. Wings rather narrow.

1. Ocneria rubea.

Albido lateritia; alæ anticæ lunula media pallida, lineisque duabus transversis obscurioribus valde remotis, posteriore in alas posticas continuata.

Ocneria rubea, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hypogymniæ Subsquammatæ*) 158, 1648. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 137, 22, 1.
———, *Scriba Beitr.* iii. pl. 17, f. 6.
Liparis rubea, *Ochs. Schmett.* iii. 190, 3; iv. 55, 3.
Phalæna rubea, *Gmel. ed. Syst. Nat.* i. 5, 2432, 559.

Bombyx rubea, *Fabr. Ent. Syst.* iii. 1, 445, 117. *Wien. Verz.* 51, C, 2. *Borkh. Schmett.* iii. 268, 94. *Esp. Schmett.* iii. pl. 89, f. 3, 559. *Hübn. Bomb.* pl. 16, f. 60, 61, pl. 56, f. 240. *God. Pap. de France*, iv. 266, pl. 26, f. 5, 6.

Laria rubea, *Meig. Syst. Beschr. Eur. Schmett.* iii. 7, pl. 81, f. 12.

Penthophora rubea, *Steph. Ill. Brit. Ent. Haust.* ii. 79, 1.

a—c. Europe. From M. Becker's collection.

2. Ocneria detrita.

Fusco-cinerea ; alæ anticæ lunula media et linea pone hanc transversa obsoleta obscurioribus.

Liparis detrita, *Ochs. Schmett.* iii. 188, 2 ; iv. 55, 2. *Boisd. Gen. et Ind. Meth.* 66. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 135, 16, 2. *Speyer, Ent. Zeit. Stett.* xiii. 318, 9.

Ocneria detrita, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hypogymniæ Subsquammatæ*) 158, 1649.

Bombyx detrita, *Borkh. Schmett.* iii. 276, 100. *Esp. Schmett.* iii. pl. 44, f. 6. *Hübn. Bomb.* pl. 16, f. 58, 59. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, B, a, b, f. 2. *God. Pap. de France*, iv. pl. 26, f. 3, 4.

Laria detrita, *Meig. Syst. Beschr. Eur. Schmett.* iii. 7, 8, pl. 81, f. 5.

a, b. Europe. From M. Becker's collection.

Genus 5. LACIPA.

Mas. Corpus gracile. Proboscis brevissima. Palpi brevissimi, porrecti ; articulus 3us minimus. Antennæ late pectinatæ. Abdomen alas posticas non superans. Pedes graciles ; tibiæ posticæ calcaribus quatuor longis. Alæ latæ.

Male. Body slender. Proboscis very short. Palpi very short, porrect; third joint very small. Antennæ deeply pectinated. Abdomen extending as far as the hind wings. Legs slender ; hind tibiæ with four long spurs. Wings broad. Fore wings with the first, second and third inferior veins near together ; fourth more than four times further from the third than the third is from the second.

1. Lacipa picta.

Mas. *Testacea ; antennæ albidæ, ramis fuscis ; thorax albidus fascia lutea ; alæ anticæ albæ, fascia perobliqua discali e guttis plurimis nigris, guttis submarginalibus nigris, fasciisque tribus luteis nigro marginatis, subtus fuscæ guttis submarginalibus unaque discali nigris.*

Liparis picta, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 24, f. 113.

Male. Testaceous. Antennæ whitish, with brown branches. Thorax whitish, with a luteous band. Fore wings white, with many black spots, which form a very oblique band in the disk, and with a row of submarginal black dots, also adorned with three luteous blackish bordered bands, one near the base, the other before the middle, the third near the row of dots; cilia testaceous; under side brown, with the row of black dots. Hind wings testaceous, with a black discal dot and a row of submarginal black dots. Length of the body 4 lines; of the wings 10 lines.

a. Cape. From Mr. Argent's collection.

2. Lacipa ? Labda.

Fulva; alæ anticæ flavæ, vitta obliqua fulva; posticæ albæ, cervino marginatæ.

Phalæna Labda, *Cram. Pap. Exot.* ii. 129, pl. 181, f. D.

Tawny. Fore wings yellow, with a slender tawny stripe, which extends from the tip nearly to the interior border at two-thirds of the length of the latter.

Surinam.

Genus 6. AROA.

Mas. Corpus gracile. Proboscis brevissima. Palpi breves, robusti, pilosi; articulus 3us minimus. Antennæ latissime pectinatæ. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latæ; posticæ abdomen vix superantes. *Fœm.*—Antennæ subpectinatæ. Abdominis latera lanuginosa.

Male. Body slender. Proboscis very short. Palpi short, stout, hairy; third joint very small. Antennæ very deeply pectinated. Legs slender; hind tibiæ with four long spurs. Wings broad. Fore wings with the third inferior vein as far from the second as the second is from the first; fourth twice further from the third than the third is from the second. Hind wings hardly extending beyond the abdomen. *Fem.*—Antennæ minutely pectinated. Abdomen lanuginose on each side.

Africa.

A. Alæ fusco conspersæ. - - - - - discalis, *Walk.*
B. Alæ nigro guttatæ.

A. Alæ aurantiacæ. - - - - - punctifera, *Walk.*
B. Alæ citrinæ, albido variæ. - - adspersa, *Herr.-Schæff.*
C. Alæ macula discali rufa. - - - - crocata, *Boisd.*
D. Alæ immaculatæ.
A. Abdomen apice pallidum.
a. Flava; abdomen albidum. - - - pygmæa, *Walk.*
b. Citrina; thorax luteus. - - - cracicollis, *Boisd.*
B. Abdomen apice nigrum. - - - - terminalis, *Walk.*

1. Aroa discalis.

Mas. *Lutea; palpi, pectus et pedes albida; abdomen pilis nonnullis nigris; alæ anticæ striga discali fasciaque lata testaceis fusco conspersis, posticæ testaceæ, margine antico vittaque postica fuscis.*

Male. Dull luteous. Palpi, pectus and legs whitish. Abdomen thinly sprinkled with black hairs. Fore wings brown, with a pale testaceous discal streak proceeding from the base to the middle, where it joins a broad band of the same colour; streak and band powdered with brown; under side testaceous, darker at the tips, with a brown stripe along the hind border and a brown subapical band. Hind wings testaceous, brown in front, and with a paler brown stripe near the inner border; under side testaceous, slightly powdered with brown, and with a short brown line parallel to the outer border, and extending from the costa at three-fourths of the length of the wing. Length of the body 6 lines; of the wings 13 lines.

a. South Africa. Presented by Dr. A. Smith.
b. Cape. From M. Dregé's collection.
c. Port Natal. From M. Gueinzius' collection.

2. Aroa punctifera.

Mas. *Pallide aurantiaca; antennæ testaceæ, ramis fuscis; alæ anticæ plumis nonnullis nigro terminatis.*

Male. Pale orange. Antennæ testaceous; branches brown. Fore wings with a few black-tipped feathers in the disk and along the inner border and along the outer border. Length of the body 4—5 lines; of the wings 11—14 lines.

a, b. South Africa.
c. Caffraria. From M. Becker's collection.
d. Port Natal. From M. Becker's collection.

3. Aroa? adspersa.

Mas. *Citrina; alæ anticæ apud discum albidæ, e guttis nigris fasciatæ; posticæ albidæ.*

Liparis adspersa, *Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 24, f. 109 (1854).

Male. Lemon-colour. Fore wings whitish in the disk, with an oblique discal band of four black dots, and with a fifth a little beyond towards the tip. Hind wings whitish.

Port Natal.

4. Aroa crocata.

Mas. *Testacea; abdomen apice luteum; alæ anticæ macula discali aurantiaca.*

Liparis crocata, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 24, f. 112 (1854). *Mas.*

Var. Fore wings with a short slight oblique blackish band behind the red discal spot, and with a black discal dot by the interior angle.

Cape.

Male. Testaceous. Antennæ with brown branches. Tip of the abdomen with a luteous tuft. Fore wings with an orange spot a little in front of the middle of the disk; with this spot there are a few black-tipped feathers, some of which also occur near the outer and the inner borders. This is very nearly allied to *O. punctifera*, but its fore wings are rather more pointed; in *O. punctifera* they are somewhat rounded, and without a discal spot. Length of the body 5 lines; of the wings 14 lines.

a. South Africa. Presented by Dr. A. Smith.
b. Port Natal. From M. Gueinzius' collection.
c. ———?

5. Aroa pygmæa.

Mas. *Flava, subtus albida; antennæ fulvæ; abdomen et alæ posticæ albida.*

Male. Yellow, whitish beneath. Antennæ tawny. Abdomen and hind wings whitish. Length of the body 3 lines; of the wings 8 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

6. AROA? CRACICOLLIS.

Mas. *Pallide citrina; thorax pallide luteus.*

Liparis cracicollis, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 24, f. 110 (1854).

Male. Pale lemon-colour. Thorax pale luteous.

Cape.

7. AROA TERMINALIS.

Mas. *Pallide aurantiaca; palpi testacei; antennæ ramis fuscis; pectus testaceum; abdomen apice nigro pilosum.*

Male. Pale orange. Palpi testaceous. Antennæ with brown plumes. Pectus testaceous. Abdomen with a tuft of long black hairs at the tip. Length of the body 4 lines; of the wings 12 lines.

a. Port Natal. From Dr. Krauss' collection.

Asia.

8. AROA SUBSTRIGOSA.

Mas. *Lutea; corpus et pedes subtus albida; antennæ testaceæ ramis fuscis; alæ anticæ supra ferrugineæ, vittis tribus irregularibus luteis.*

Male. Luteous. Body and legs whitish beneath. Antennæ testaceous; branches brown. Wings with ferruginous ciliæ. Fore wings above ferruginous, with three irregular luteous stripes; first and second stripes discal, interrupted; third on the hind border. Length of the body 5—5½ lines; of the wings 13—14 lines.

Var. β. Wings almost orange. Stripes of the fore wings indistinct.

a. Silhet. Presented by E. Doubleday, Esq.
b. Silhet. From Mr. Argent's collection.
c. Java. From the East India Company's collection.
d. Hong Kong. Presented by Lieut.-Col. Champion.
e. Hong Kong. Presented by J. C. Bowring, Esq.

Genus 7. ARTAXA.

Mas. et fœm. Corpus sat gracile. Proboscis brevissima. Palpi pilosi, breves; articulus 2us 1o multo longior; 3us conicus,

minimus. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latæ; posticæ abdomen superantes. *Mas.*—Antennæ late pectinatæ. *Fœm.*—Antennæ subpectinatæ.

Male and fem. Body rather slender. Proboscis very short. Palpi hairy, short; second joint very much longer than the first; third joint conical, very minute. Legs slender; hind tibiæ with four long spurs. Wings broad. Fore wings with the first, second and third inferior veins near together; fourth about four times further from the third than the third is from the second. Hind wings extending beyond the abdomen. *Male.*—Antennæ deeply pectinated. *Female.*—Antennæ minutely pectinated.

1. ARTAXA GUTTATA.

Mas. et fœm. *Testacea, albido varia; alæ anticæ sæpe nigro guttatæ.*

Male. Testaceous. Hind legs, hind wings and under side of fore wings whitish. Fore wings with two black subapical dots in a transverse line, and with an oblique rather darker testaceous whitish-bordered band. *Female.*—Wings without spots. Length of the body 3—5½ lines; of the wings 8—15 lines.

Var. β. Male. Fore wings with a dark brown spot by the interior angle.

Var. γ. Male. Fore wings without spots.

a, b. Silhet. From Mr. Sowerby's collection.
c, d. East Indies. From Archdeacon Clerk's collection.
e—h. North India. From Mr. James' collection.
i, j. Nepaul. Presented by Major-Gen. Hardwicke.
k, l. North India. Presented by Brigadier-Gen. Hearsay.

Var. *δ.* Mas. et fœm. *Pallide flava; corpus subtus, palpi et pedes albida; antennæ albidæ, ramis testaceis; alæ anticæ discis luteo notatis, guttis duabus subapicalibus unaque postica nigris.*

Male and fem. Pale yellow. Body beneath, palpi and legs whitish. Antennæ whitish, with dull testaceous branches. Disks of the fore wings mostly occupied with pale luteous marks, which in the male are more distinct than in the female, and have some of their plumes with brown tips; two black subapical dots, and one near the hind angle. Length of the body 2¾—4½ lines; of the wings 7—12 lines.

Var. β. Luteous marks in the fore wings very indistinct.

m—p. North India. From Mr. Stevens' collection.
q. North China. From Mr. Fortune's collection.
r. Ceylon. Presented by R. Templeton, Esq.

2. Artaxa varians.

Mas. et fœm. *Flava, subtus pallide flava; alæ anticæ strigis nonnullis obliquis indistinctis albidis; posticæ pallide flavæ.* Mas.—*Corpus ex parte albido pilosum; antennæ pedesque albida.*

Male and fem. Yellow; under side and hind wings pale yellow. Fore wings with some oblique indistinct whitish marks. *Male.*—Body partly clothed with whitish hairs. Antennæ whitish above, with darker branches. Legs whitish. Whitish marks on the fore wings more distinct than those of the female. Length of the body 2½—4 lines; of the wings 7—12 lines.

a—d. China. Presented by G. T. Lay, Esq.
e, f. East Indies. From Archdeacon Clerk's collection.
g, h. North India. From Mr. Stevens' collection.
i. North India. From Mr. James' collection.
j. Punjaub. Presented by Brigadier-Gen. Hearsay.
k. North China. From Mr. Cuming's collection.
l, m. Hong Kong. Presented by Lieut.-Col. Champion.
n, o. Congo. Presented by Sir J. Richardson.
p. Sierra Leone. Presented by the Rev. D. F. Morgan.

3. Artaxa atomaria.

Fœm. *Ferruginea; abdomen fuscum; alæ subtus et posticæ quoque supra fuscæ testaceo marginatæ, anticæ supra fulvæ, aut albidæ fusco guttatæ et testaceo maculatæ.*

Female. Ferruginous. Abdomen brown. Wings beneath and hind wings above brown, with testaceous borders. Fore wings above tawny, flecked with brown; a testaceous spot, with two dark brown dots occupying the tip; another testaceous spot on the interior angle. Nearly allied to *A. biguttata*, but with narrower wings. Length of the body 3—4½ lines; of the wings 10—14 lines.

Var. β. Body and wings testaceous. Fore wings above whitish, flecked with brown, with two yellow spots, but with no brown apical dots.

a. 43, 43. East Indies. From Archdeacon Clerk's collection.
b. 43, 10. North India. From Mr. James' collection.

Genus 8. CHARNIDAS.

Mas. Corpus sat validum. Proboscis brevissima. Palpi pilosi, brevissimi; articulus 3us minimus. Antennæ latissime pectinatæ. Pedes graciles; femora tibiæque longe pilosa; tibiæ posticæ calcaribus quatuor longis. Alæ latæ; posticæ abdomen superantes.

Male. Body moderately stout. Proboscis very short. Palpi hairy, very short; third joint very small. Antennæ very deeply pectinated. Legs slender; femora and tibiæ with long hairs; hind tibiæ with four long spurs. Wings broad. Fore wings with the third inferior vein as far from the second as the second is from the first; fourth four times further from the third than the third is from the second. Hind wings extending beyond the abdomen.

1. Charnidas litura.

Mas. *Fusca; caput et palpi lutea; antennæ testaceæ, ramis fuscis; pectus, abdomen subtus et pedes testacea; alæ anticæ nigro triguttatæ.*

Male. Brown. Head and palpi luteous. Antennæ pale testaceous, with brown branches. Pectus, abdomen beneath and legs testaceous. Fore wings with three black dots in a transverse line at the tip of the discal areolet; under side a little paler. Hind wings like the fore wings in colour, but not marked. Length of the body 5½—6 lines; of the wings 13—14 lines.

a, b. Nepaul. Presented by Major-Gen. Hardwicke.

2. Charnidas fulviceps.

Mas. *Fusco-schistacea; caput, thorax antice pedesque antici ex parte fulvo pilosa; alæ nitentes, ciliis pallidioribus.*

Male. Brownish slate-colour. Head, fore part of the thorax and fore coxæ with tawny hairs. Antennæ pale slate-colour, with brown branches. Legs pale slate-colour; fore legs partly clothed with tawny hairs. Wings shining, with paler cilia. Length of the body 5 lines; of the wings 14 lines.

a. Van Dieman's Land. Presented by Morton Allport, Esq.

Genus 9. ACYPHAS.

Mas. Corpus mediocriter robustum. Proboscis brevissima. Palpi validi, longiusculi; porrecti, subtus pilosissimi, caput superantes; articulus 3us parvus. Antennæ latissime pectinatæ. Abdomen

alas posticas non superans. Pedes sat validi; femora tibiæque pilosissima; tibiæ posticæ calcaribus quatuor longis.

Male. Body moderately stout. Proboscis very short. Palpi stout, rather long, very hairy beneath, porrect, extending some distance beyond the head; third joint small. Antennæ very deeply pectinated; tips of the branches setose. Legs moderately stout; femora and tibiæ very hairy; hind tibiæ with four long spurs. Wings broad. Fore wings with the third inferior vein as far from the second as the second is from the first; fourth four times further from the third than the third is from the second. Hind wings extending as far as the abdomen.

1. ACYPHAS VIRIDESCENS.

Mas. *Fusca, albido varia; alæ anticæ basi albidæ nigro notatæ, fascia lata media viridi, strigis duabus fuscis liturisque nonnullis albidis; posticæ albidæ, fusco conspersæ.*

Male. Body clothed with brown, and with a few whitish hairs; under side wholly with whitish hairs. Antennæ dark brown, whitish above. Abdomen dingy whitish above. Legs whitish; anterior legs deeply ciliated. Wings dingy whitish beneath. Fore wings brown, whitish with some black marks at the base, and with scales of pale metallic green, which form a broad oblique middle band; also with two slender oblique many-curved dark brown bands, one on each side of the green band; the brown part contains some whitish curves, and there are two clear white transverse streaks in the green band. Hind wings whitish, very minutely flecked with pale brown. Length of the body 4 lines; of the wings 10½ lines.

a. Ceylon. From the Rev. J. Wenham's collection.

2. ACYPHAS FUSCA.

Mas. *Obscure fusca; caput et thorax antice lutea; pectus, abdomen subtus et pedes testacea; alarum ciliæ subtus fasciis obscurioribus et pallidioribus.*

Male. Dark brown. Head and thorax in front luteous. Antennæ pale testaceous, with brown branches. Pectus, abdomen beneath and legs testaceous. Fore wings and hind wings alike in colour; cilia beneath with alternate dark and pale brown bands. Length of the body 6 lines; of the wings 15 lines.

a, b. New Holland. Presented by Major-Gen. Hardwicke.
c. Van Dieman's Land. Presented by J. G. Children, Esq.

3. ACYPHAS PLAGIATA.

Mas. *Fusca, subtus albida; pedes albidi; alæ anticæ fasciis nonnullis obliquis undulatis obscurioribus, vittaque lata interrupta costali albida, maculaque parva postica testacea; posticæ pallidiores.*

Brown. Palpi and body whitish beneath. Legs whitish. Fore wings above brown, with three or four darker brown oblique undulating bands; a broad whitish interrupted stripe along the costa, and a small pale testaceous spot near the hind angle, situated like that of *Orgyia gonostigma;* under side pale brown, with a faint oblique discal darker band. Hind wings pale brown, whitish towards the hind angle. Length of the body 5 lines; of the wings 13 lines.

a. ——— ?

4. ACYPHAS ROBUSTA.

Mas. *Fusca; corpus supra pilis nonnullis albis, subtus testaceo alboque pilosum; palpi subtus testacei; pedes supra fasciis fulvis albidisque subtus albidi; alæ albido notatæ, subtus albidæ.*

Male. Body above brown, with a few white hairs; under side with testaceous and white hairs. Palpi brown above, testaceous beneath. Legs above with alternate bands of tawny and whitish hairs, whitish beneath. Wings above brown, with many small irregular whitish marks, which are mostly on the fore wings; under side whitish. Length of the body 6 lines; of the wings 14 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 10. REPENA.

Mas. Corpus gracillimum. Palpi porrecti, graciles, pilosi, longiusculi, caput sat longe superantes; articulus 2us 1o multo longior; 3us elongatus, lanceolatus, 2o brevior. Antennæ late pectinatæ. Abdomen alas posticas non superans. Pedes graciles, vix pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ latæ, anticæ ad costam rectæ.

Male. Body very slender. Palpi porrect, slender, pilose, rather long, extending some distance beyond the head; second joint much longer than the first; third elongate, lanceolate, shorter than the second. Antennæ deeply pectinated. Abdomen extending nearly as far as the hind wings. Legs slender, hardly pilose; hind

tibiæ with four long spurs. Wings broad. Fore wings straight along the costa, rounded at the tips, oblique and very slightly convex along the exterior border; interior angle much rounded; second inferior vein as far from the first as from the third; third about thrice further from the fourth than from the second.

1. Repena cervina.

Mas. *Cervina; subtus pallidior; alæ anticæ litura discali transversa nigricante.*

Male. Fawn-colour, paler beneath. Antennæ with blackish and pilose branches. Fore wings with a blackish transverse mark at the tip of the discal areolet. Length of the body 5½ lines; of the wings 14 lines.

East Indies. In Mr. Saunders' collection.

Genus 11. SARSINA.

Mas. Corpus sat robustum. Palpi porrecti, pilosi, sat longi et validi, caput vix superantes; articulus 2us 1o plus duplo longior; 3us conicus, minimus. Antennæ late pectinatæ, thorace non longiores. Abdomen alas posticas non superans. Pedes mediocriter validi; tibiæ posticæ calcaribus quatuor parvis. Alæ latæ, longius culæ; anticæ ad costam subconvexæ.

Male. Body moderately stout. Palpi porrect, pilose, moderately long and stout, extending very little beyond the head; second joint more than twice the length of the first; third conical, very minute. Antennæ deeply pectinated, not longer than the thorax. Abdomen extending nearly as far as the hind wings. Legs moderately stout, clothed with short hairs; hind tibiæ with four small spurs. Wings broad, rather long. Fore wings somewhat convex in front, rounded at the tips, oblique along the exterior border; interior angle obtuse, distinct; first, second and third inferior veins nearly contiguous at the base; third about four times further from the fourth than from the first. This genus seems to be somewhat allied to the *Dupanulidæ*.

1. Sarsina purpurascens.

Mas. *Pallide purpurascens; abdomen supra albidum; alæ anticæ fasciis duabus strigis duabus apicibusque viridescentibus; posticæ apud discum albidæ.*

Male. Pale purplish. Antennæ with brown branches. Abdomen whitish above, except at the tip. Wings whitish beneath towards the interior border. Fore wings greenish at the tips, and with two oblique greenish bands; first band near the base, imperfect; second rather broad, a little beyond the middle; two slender undulating streaks between the second band and the exterior border. Hind wings whitish above, except about the borders. Length of the body 6 lines; of the wings 18 lines.

Yucatan. In Mr. Saunders' collection.

Genus 12. ANTHORA.

Mas. Corpus gracillimum. Palpi porrecti, longiusculi, sat validi, subtus pilosi, caput superantes; articulus 2us 1o valde longior; 3us minutus, acutus, conicus. Antennæ latissime pectinatæ. Abdomen alas posticas non superans. Pedes graciles, subnudi; tibiæ posticæ calcaribus quatuor longis. Alæ latæ.

Male. Body very slender. Palpi porrect, rather long and stout, pilose beneath, extending beyond the head; second joint very much longer than the first; third minute, acute-conical. Antennæ very deeply pectinated. Abdomen not extending beyond the hind wings. Legs slender, nearly bare; hind tibiæ with four long spurs. Wings broad. Fore wings with the second inferior vein as near to the third as to the first; third twice further from the fourth than from the second.

1. ANTHORA SUBROSEA.

Mas. *Albida; thorax et alarum anticarum margines subrosei; alæ anticæ guttis marginalibus nigris.*

Male. Whitish, slightly tinged with rose-colour on the thorax and on the borders of the fore wings; the latter have a submarginal row of black dots. Length of the body 4½ lines; of the wings 10 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 13. LACIDA.

Mas. Corpus gracile. Proboscis brevissima. Palpi validi; pilosi, porrecti, caput superantes; articulus 3us minimus. Antennæ latissime pectinatæ. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; posticæ abdomen sat longe superantes.

Male. Body slender. Proboscis very short. Palpi stout, hairy, porrect, extending some distance beyond the head, third joint very small. Antennæ very deeply pectinated. Legs slender; hind tibiæ with four long spurs. Wings rather broad. Fore-wings with the third inferior vein as far from the second as the second is from the first; fourth more than twice further from the third than the third is from the second. Hind wings extending some distance beyond the abdomen.

A. Alæ nigro variæ.
A. Alæ posticæ fuscæ. - - - - rotundata, *Walk.*
B. Alæ posticæ albidæ. - - - - antica, *Walk.*
B. Alæ non nigro variæ.
A. Alæ posticæ fulvo vittatæ. - - - subnotata, *Walk.*
B. Alæ posticæ totæ fuscæ. - - - postica, *Walk.*

1. Lacida rotundata.

Mas. *Ferruginea; palpi subtus, pectus, abdomen et pedes pallidiora; alæ anticæ nigro notatæ, disco subtus fusco cano postice marginato; posticæ fuscæ, antice canæ, subtus ferrugineæ, macula discali nigricante.*

Male. Ferruginous. Palpi beneath, pectus, abdomen and legs pale ferruginous. Fore wings with black flecks, which are most thick along the costa; an angular black mark at the end of the discal areolet; under side with the disk brown and the hind border hoary. Hind wings above pale brown, hoary in front; under side pale ferruginous, with a small blackish discal spot. Length of the body 5 lines; of the wings 13 lines.

a, *b*. Ceylon. Presented by R. Templeton, Esq.

2. Lacida antica.

Mas. *Fusca, albido ex parte pilosa; alæ anticæ nigro variæ, in disco ex parte albidæ; posticæ albidæ, fusco conspersæ maculaque subtus discali fusca.*

Male. Body, palpi and legs with brown and whitish hairs. Antennæ whitish, with brown plumes. Fore wings brown, partly whitish in the disk and varied with black, which appears in some marks towards the base, in a circlet between the costa and the middle, in an oblique band which is a little beyond the circlet, and extends to two-thirds of the breadth from the costa, in a row of subapical dots, and in some slighter marks; under side brown, mostly

with a whitish border; cilia with alternate brown and whitish bands. Hind wings whitish, powdered with brown, and with a brown spot on the under side in the disk before the middle. Length of the body 6 lines; of the wings 14 lines.

a. Ceylon. Presented by R. Templeton, Esq.

3. LACIDA SUBNOTATA.

Mas. *Fusca; corpus subtus pallide testaceum; palpi testacei; pedes albidi; alarum disci subtus plerumque lutei, macula discali obscure fusca; posticæ vitta supra lata discali fulva.*

Male. Brown. Body pale testaceous beneath. Palpi pale testaceous. Antennæ pale brown, with darker branches. Legs whitish. Disks of the wings beneath mostly luteous, with a dark brown spot by each discal areolet. Hind wings above with a broad tawny discal stripe. Length of the body 3½ lines; of the wings 9 lines.

a. Ceylon. From the Rev. J. Wenham's collection.

4. LACIDA POSTICA.

Mas. *Fusca; corpus subtus, palpi et pedes albida; alæ anticæ fusco obscuriore albidoque variæ.*

Male. Brown. Palpi, body beneath and legs whitish. Fore wings indistinctly varied with dark brown and dingy white; the former colour forms a zigzag band; the latter a double band, single in the middle and crossing the other very obliquely. Hind wings rather darker than the fore wings. Length of the body 4 lines; of the wings 10 lines.

a. East Indies. From Archdeacon Clerk's collection.

Genus 14. TEIA.

Mas. Corpus vix robustum. Palpi densissime pilosi; articulus 2us 1o longior; 3us minimus. Antennæ latissime pectinatæ. Abdomen alas posticas non superans. Pedes validi, hirti; tibiæ posticæ calcaribus apicalibus mediocriter longis. Alæ anticæ sat angustæ, posticæ latiores.

Male. Body hardly stout. Palpi very thickly clothed with hairs; second joint longer than the first; third very small. Antennæ very deeply pectinated. Abdomen tapering slightly from the base to the tip, extending as far as the hind wings. Legs stout, hairy; hind tibiæ with two apical spurs of moderate length. Fore wings

rather narrow; third inferior vein much further from the second than the second is from the first; fourth rather further from the third than the third is from the second. Hind wings moderately broad.

1. TEIA ANARTOIDES.

Mas. *Cinereo-fusca; palpi lutei; thorax postice luteo varius; tibiæ anticæ luteo fasciatæ, posticæ necnon tarsi posteriores testacea; alæ anticæ ferrugineo-fuscæ albo conspersæ fasciisque duabus obscure fuscis; posticæ luteæ, nigro latissime marginatæ.*

Male. Body and legs with grayish brown hairs. Palpi luteous. Antennæ black, whitish above. Hind part of the thorax with some luteous hairs. Fore tibiæ with luteous bands; hind tibiæ and posterior tarsi mostly testaceous. Fore wings ferruginous brown, sprinkled with white, which forms three imperfect and diffused bands, and a like costal subapical spot; also with two dark brown discal bands, the outer one deeply undulating; under side dull pale luteous towards the hind border. Hind wings luteous, with very broad black borders; fimbria luteous.

Var. β. Fore wings paler ferruginous, with the white marks less prevalent. Length of the body 3½—5 lines; of the wings 10—12 lines.

a—d. Van Dieman's Land. Presented by R. Butler, Esq.
e. Australia. From Dr. Stevenson's collection.
f. Van Dieman's Land. Presented by E. Doubleday, Esq.
g. Sydney. From Mr. Lambert's collection.
h. New Holland. From Mr. Milne's collection.
i, j. New Holland.

Genus 15. AMSACTA.

Mas. Corpus gracile, cylindricum. Palpi breves, vix pilosi. Antennæ sat late pectinatæ. Abdomen alas posticas vix superans. Pedes sat graciles; tibiæ posticæ calcaribus duobus apicalibus longiusculis. Alæ anticæ angustæ; posticæ paullo latiores.

Male. Body slender, cylindrical. Palpi short, rather thinly clothed with short hairs; second joint much longer than the first; third conical, small. Antennæ rather deeply pectinated, more than half the length of the body. Abdomen tapering very slightly from the base to the tip, hardly extending beyond the hind wings. Legs rather slender; hind tibiæ with two rather long apical spurs.

Fore wings not broad, straight in front; first, second and third inferior veins very near together at the base; fourth very remote from them. Hind wings rather broader than the fore wings.

1. AMSACTA MARGINALIS.

Mas. *Fusca; caput, pectus, abdomen subtus et pedes testacea; abdomen testaceo fasciatum; alæ anticæ ferrugineo-fuscæ, testaceo marginatæ.*

Male. Brown. Head, palpi, pectus, legs and abdomen beneath testaceous. Antennæ black, testaceous above. Abdomen dark brown, with testaceous bands. Fore wings ferruginous brown; costa and inner border testaceous. Hind wings brown. Length of the body 4—4½ lines; of the wings 10—11 lines.

a—c. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 16. ARESTHA.

Mas. Corpus gracile. Proboscis brevissima. Palpi sat breves, late ciliati; articulus 2us 1o multo longior; 3us minimus. Antennæ latissime pectinatæ. Abdomen alas posticas superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis; anticæ late ciliatæ. Alæ anticæ sat angustæ; posticæ latæ.

Male. Body slender. Proboscis very short. Palpi rather short, deeply fringed; second joint much longer than the first; third very small. Antennæ very deeply pectinated. Abdomen extending beyond the hind wings. Legs slender; hind tibiæ with four long spurs; fore tibiæ deeply ciliated. Fore wings not broad, with three inferior veins, which are near together; third a little further from the second than the second is from the first. Hind wings broad.

1. ARESTHA ANTICA.

Mas. *Albida-testacea; antennæ albidæ, ramis testaceis; alæ anticæ testaceæ, vittis duabus discalibus albidis; posticæ albæ ciliis testaceis.*

Male. Whitish testaceous. Antennæ whitish, with testaceous branches. Fore wings testaceous, with two discal whitish stripes. Hind wings white, with testaceous ciliæ. Length of the body 5 lines; of the wings 11 lines.

a. Java. From the East India Company's collection.

Genus 17. ANTIPHA.

Mas. Corpus gracile. Palpi porrecti, validi, pilosi, caput superantes; articulus 2us 1o multo longior; 3us parvus, conicus, acutus. Antennæ latissime pectinatæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus longis apicalibus. Alæ latæ.

Male. Body slender. Palpi porrect, stout, pilose, extending beyond the head; second joint much longer than the first; third small, acute-conical. Antennæ very deeply pectinated. Abdomen not extending beyond the hind wings. Legs slender; hind tibiæ with long apical spurs. Wings broad. Fore wings with three inferior veins; first and second contiguous at the base; third near the second.

1. ANTIPHA COSTALIS.

Mas. *Sordide albida; caput, thorax anticus et pedes antici supra fusca; alæ anticæ fusco conspersæ, basi, costæ dimidio basali fasciaque brevi lata obliqua fuscis, maculis tribus discalibus nigricantibus.*

Male. Dingy whitish. Head and fore part of the thorax brown. Antennæ with brown branches. Anterior legs mostly brown above. Fore wings speckled with brown, almost wholly brown towards the base, and from thence along more than half the length of the costa; three blackish spots in the disk, and a broad oblique deep brown band proceeding from thence to the tip of the costa; a few brown dots along the exterior margin. Length of the body 4 lines; of the wings 10 lines.

a. Ceylon. Presented by R. Templeton, Esq.

2. ANTIPHA BASALIS.

Mas. *Fusca, subtus albida; abdomen et pedes postici albida; alæ anticæ macula basali atra fasciisque tribus subobsoletis nigricantibus; posticæ albidæ.*

Male. Brown, whitish beneath. Abdomen and legs whitish. Fore wings with a black spot in the disk very near the base, and with three undulating indistinct, imperfect, and very slender blackish bands; first band beyond the middle; second beyond two-thirds of the length; third very near the exterior border. Hind wings whitish. Length of the body 6 lines; of the wings 13 lines.

East Indies. In Mr. Saunders' collection.

Genus 18. ACRAGA.

Mas. Corpus gracile. Proboscis brevissima. Palpi graciles, brevissimi; articulus 3us minimus. Antennæ subpectinatæ. Pedes graciles, late ciliati; tibiæ posticæ calcaribus quatuor longis. Alæ latæ; posticæ abdomen longe superantes.

Male. Body slender. Proboscis very short. Palpi slender, very short; third joint very small. Antennæ minutely pectinated. Legs slender, fringed with long hairs; hind tibiæ with four long spurs. Wings broad. Fore wings with the third inferior vein full twice further from the second than the second is from the first; fourth further by half from the third than the third is from the second. Hind wings extending far beyond the abdomen.

1. ACRAGA CILIATA.

Mas. *Pallide lutea; corpus et pedes subtus albida; antennæ albidæ, ramis fulvis; alæ anticæ liturâ discali ferruginea.*

Male. Pale luteous. Body and legs whitish beneath. Antennæ whitish, with tawny branches. Fore wings with a ferruginous mark at the end of the discal areolet. Length of the body 4 lines; of the wings 12 lines.

a. Jamaica. From Mr. Gosse's collection.

Genus 19. MARCIPA.

Mas. Corpus gracile. Proboscis brevissima. Palpi pilosi, mediocriter longi, subarcuati, ascendentes; articulus 2us lo multo longior; 3us minimus. Antennæ late pectinatæ. Abdomen alas posticas superans, apice fasciculatum. Alæ latæ.

Male. Body slender. Proboscis very short. Palpi hairy, moderately long, slightly curved, ascending; second joint very much longer than the first; third very minute. Antennæ deeply pectinated. Abdomen extending beyond the hind wings, tufted at the tip. Wings broad. Fore wings with the third inferior vein nearer to the second than the second is to the first; fourth full thrice further from the third than the second is from the first.

1. MARCIPA INSCRIPTA.

Mas. *Fusca, subtus albida; antennæ albidæ, ramis nigris; abdomen fusco albidoque pilosum; alæ anticæ albido-fuscæ, liturris nonnullis obscurioribus albido marginatis, fasciaque lata angulata guttas duas nigro-fusca includente, subtus canæ fusco conspersæ; posticæ cinereæ, subtus cano albidæ antice fusco conspersæ.*

Male. Brown; under side whitish. Antennæ whitish, with black branches. Abdomen with brown and whitish hairs. Fore wings whitish brown, with several darker brown whitish-bordered marks, four along the costa; first and second small, third attenuated, oblique, inclined towards the fourth, which is subapical and subquadrate; two blackish brown dots in front of the middle, one of them half surrounded by a curved blackish brown streak, and both included in a broad nearly rectangular brown band, which occupies much of the disk of the wing; under side hoary, whitish and speckled with brown in front; a black tuft on the inner border. Hind wings gray; under side hoary, whitish, with brown speckles in front. Length of the body 5 lines; of the wings 11½ lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 20. MELIA.

Mas. Corpus gracile. Proboscis brevissima. Palpi breves, decumbentes, brevisculi; articulus 3us minimus. Antennæ mediocriter pectinatæ. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ.

Male. Body slender. Proboscis very short. Palpi hairy, decumbent, rather short; third joint very small. Antennæ moderately pectinated. Legs slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings with the third inferior vein a little nearer to the second than the second is to the first; fourth about thrice further from the third than the second is from the first.

1. MELIA COSTALIS.

Mas. *Fusca, subtus cum pedibus fusco-alba; antennæ fusco-albæ, ramis fuscis; alæ anticæ pallide cinereo-fuscæ, fasciis tribus macula subapicali liturisque nonnullis obscurioribus; posticæ pallide cinereo-fuscæ, gutta discali fasciaque interrupta submarginali subtus fuscis.*

Male. Brown; under side and legs mostly brownish white. Antennæ brownish white; branches brown. Fore wings pale grayish brown, varied with dark brown, which appears in two bands before the middle, in a slender undulating band beyond the middle, in a subapical spot on the costa and in some lesser marks; some of these marks appear in a slight degree on the under side. Hind wings pale grayish brown, not marked with brown above, but with a discal dot and an interrupted submarginal band beneath. Length of the body 5 lines; of the wings 12 lines.

a. Java. From the East India Company's collection.

Genus 21. DULICHIA.

Mas. Corpus sat gracile. Palpi porrecti, mediocriter longi, caput superantes; articulus 1us 2o brevior; 3us conicus, minimus. Antennæ late pectinatæ. Abdomen alas posticas paullo superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ.

Male. Body rather slender. Palpi porrect, moderately long, extending beyond the head; first joint shorter than the second; third conical, very small. Antennæ deeply pectinated. Abdomen extending a little beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings with the first, second and third inferior veins very near together at the base; fourth more than four times further from the third than the third is from the first.

1. Dulichia fasciata.

Mas. *Flava; alæ anticæ fasciis duabus obliquis subundulatis fere parallelis ochraceis, nigro conspersæ; posticæ flavo-albæ.*

Male. Yellow, paler beneath. Antennæ testaceous. Fore wings with two oblique discal slightly undulating nearly parallel orange bands; several black-tipped plumes in the space enclosed by these bands, and some long black plumes on the hind border between them. Hind wings yellowish white. Length of the body 5 lines; of the wings 11 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 22. ANAXILA.

Mas. Corpus sat gracile. Palpi validi, pilosi, porrecti, caput paullo superantes; articulus 2us 1o multo longior; 3us minutus, conicus. Antennæ late pectinatæ. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ sat latæ.

Male. Body rather slender, clothed with short hairs. Palpi stout, hairy, porrect, extending a little beyond the head; second joint much longer than the first; third minute, conical. Antennæ deeply pectinated. Abdomen extending as far as the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings with the first and second inferior veins near together at the base; third rather further from the second than the second is from the first; fourth about twice further from the third than the third is from the second.

1. ANAXILA PLAGIATA.

Mas. *Alba, fusco varia.*

Male. White. Palpi and antennæ brown, the latter with white tomentum. Thorax with a brown band in front. Fore legs mostly brown. Fore wings with a brown spot at the base of the costa, with a brown streak on the hinder part of the exterior margin, and with a very large subquadrate brown spot extending from the costa to the discal areolet. Length of the body 4 lines; of the wings 10 lines.

a. ——— ? Presented by E. Doubleday, Esq.

Genus 23. ARGILA.

Mas. Corpus gracile. Palpi porrecti, pilosi, caput longe superantes; articulus 2us 1o multo longior; 3us conicus, minimus. Antennæ latissime pectinatæ. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus duobus apicalibus mediocriter longis? Alæ latæ.

Male. Body slender. Palpi porrect, hairy, extending much beyond the head; second joint much longer than the first; third conical, very small. Antennæ extremely deeply pectinated, rather less than half the length of the body. Abdomen extending as far

as the hind wings. Legs slender; hind tibiæ with two moderately long apical spurs? Wings broad. Fore wings somewhat rounded; first and second inferior veins contiguous at the base; fourth nearly four times further from the third than the third is from the second.

1. ARGILA BASALIS.

Mas. *Albido-cervina, albo fuscoque varia; alæ anticæ fasciis duabus angulosis obliquis fuscis, posticæ albæ.*

Male. Whitish fawn-colour. Thorax brown on each side by the fore wing. Fore wings with a large white spot near the base; this spot has black flecks on the disk, and is mostly bordered with black on the outer side; a brown curved band is contiguous to this spot, and has a darker outward border; beyond the latter the wings are pale brown, mostly whitish in front and with some whitish marks elsewhere, and with two slender brown zigzag oblique bands. Hind wings white. Length of the body 3½ lines; of the wings 9 lines.

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 24. CROREMA.

Mas. Corpus gracillimum. Palpi mediocriter longi, caput superantes; articulus 2us 1o plus duplo longior; 3us minutus, conicus. Antennæ latissime pectinatæ. Abdomen alas posticas non superans. Pedes nudi, gracillimi; tibiæ posticæ calcaribus quatuor longis. Alæ latæ.

Male. Body very slender. Proboscis very short or obsolete. Palpi moderately long, extending beyond the head; second joint more than twice the length of the first; third minute, conical. Antennæ very deeply pectinated, much more than half the length of the body. Abdomen extending almost as far as the hind wings. Legs bare, very slender; hind tibiæ with four long spurs. Wings broad. Fore wings very slightly convex along the costa, rounded at the tips; second inferior vein about thrice further from the third than from the first; third very much further from the fourth than from the second.

1. CROREMA MENTIENS.

Mas. *Pallide testacea; abdomen supra albidum; alæ anticæ fascia interrupta fusca, posticæ albidæ.*

Male. Pale testaceous. Abdomen above whitish. Fore wings with an indistinct interrupted oblique pale brown discal band. Hind wings whitish. Length of the body 5 lines; of the wings 12 lines.

a. Congo. Presented by Sir J. Richardson.
b. ———? From Mr. Milne's collection.

Genus 25. PROCODECA.

Mas. Corpus gracile, pilosum. Palpi porrecti, longi, hirti, caput longe superantes; articulus 2us 1o multo longior; 3us lanceolatus, 1o brevior. Antennæ latissime pectinatæ. Abdomen alas posticas non superans. Pedes posteriores graciles, subnudi; tibiæ posticæ calcaribus quatuor longis. Alæ anticæ vix latæ. *Fœm.*?—Crassior. Palpi breviores; caput paullo superantes. Antennæ subpectinatæ.

Male. Body slender, hairy. Proboscis very short. Palpi porrect, long, hairy, extending far beyond the head; second joint much longer than the first; third lanceolate, shorter than the first. Antennæ very deeply pectinated, much more than half the length of the body; branches setose. Abdomen not extending beyond the hind wings. Legs slender, almost bare; fore legs stouter, hairy; hind tibiæ with four long spurs. Fore wings hardly broad, almost straight along the costa, rounded at the tips; exterior border hardly oblique; second inferior vein as far from the first as from the third; third full thrice further from the fourth than from the second. *Female.*?—Body rather stouter. Palpi shorter, extending very little beyond the head. Antennæ very minutely pectinated. Fore wings with the exterior border much more oblique than in the male; second inferior vein much nearer to the first than to the third.

1. Procodeca quadrata.

Mas. *Albida, luteo varia; pedes anteriores fusco vittati; alæ anticæ fusco strigatæ et guttatæ.*

Male. Whitish. Head slightly testaceous, pale luteous at the base of the antennæ. Palpi pale luteous. Antennæ with brown branches. Anterior legs striped with brown. Fore wings slightly shaded with pale brown streaks, fawn-colour along the costa; five brown dots between the veins, forming an oblique band, which is almost parallel to the border. Length of the body 4—5 lines; of the wings 12—16 lines.

a—*c*. New Holland. From M. Becker's collection.
d. New Holland. Presented by E. Doubleday, Esq.
e—*g*. New South Wales. From Mr. Milne's collection.
h. New Holland.

Fœm.? *Antennæ serratæ; alæ angustiores, immaculatæ.*

Fem.? Like the male in colour. Wings immaculate. Fore wings narrower.

i. New Holland. Presented by E. Doubleday, Esq.
j. New South Wales. From Mr. Milne's collection.
k. New Holland.

Genus 26. ELORIA.

Mas. Corpus gracillimum. Proboscis inconspicua. Palpi porrecti, graciles, mediocriter longi, caput paullo superantes; articulus 2us 1o duplo longior; 3us lanceolatus, 1o brevior. Antennæ late pectinatæ. Abdomen apice subfasciculatum. Pedes gracillimi, nudi; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ latæ; posticæ abdomen superantes.

Body very slender. Proboscis very short or obsolete. Palpi porrect, slender, moderately long, extending rather beyond the head; second joint about twice the length of the first; third lanceolate, shorter than the first. Abdomen not extending so far as the hind wings. Legs very slender, bare; hind tibiæ with two small apical spurs. Wings broad. Fore wings slightly convex along the costa; second inferior vein about thrice further from the third than from the first; third more than twice further from the fourth than from the second. *Male.*—Antennæ deeply pectinated. Abdomen slightly tufted at the tip.

A. Alæ posticæ nigro ex parte marginatæ.
  A. Alæ latiores. - - - - - marginalis, *Walk.*
  B. Alæ angustiores. - - - - - divisa, *Walk.*
B. Alæ posticæ non nigro marginatæ.
  A. Alæ apice nigricantes. - - - - apicalis, *Walk.*
  B. Alæ apice subcinereæ. - - - - subapicalis, *Walk.*
  C. Alæ apice albæ.
    a. Alæ anticæ costa basi nigra. - - - subnuda, *Walk.*
    b. Alæ anticæ costa tota nigra. - - intacta, *Walk.*

1. Eloria subnuda.

Mas. *Alba; alæ subhyalinæ, venis albis; anticæ costa basi nigra.*

Male. White. Antennæ with brown branches. Body luteous, with white tomentum; hairs at the tip of the abdomen partly luteous. Wings semidiaphanous, thinly clothed with very minute hairs; costa black towards the base; veins white. Length of the body 5½ lines; of the wings 16 lines.

a. Honduras. From Mr. Dyson's collection.
b, *c*. Brazil. From Mr. Milne's collection.
d. ———?

2. Eloria subapicalis.

Mas. *Alba; alæ subhyalinæ, venis albis; anticæ apice subcinereæ, costa basi nigricante.*

Male. White. Antennæ with brown branches. Body testaceous, with white tomentum. Wings semidiaphanous, thinly clothed with very minute hairs; tips of the fore wings indistinctly tinged with gray; costa blackish towards the base; veins white; second inferior vein a little more than twice further from the third than from the first; third much further from the fourth than from the second. Length of the body 5½—6 lines; of the wings 16—17 lines.

a, *b*. Venezuela. From Mr. Dyson's collection.

3. Eloria intacta.

Mas. *Alba; alæ subhyalinæ, venis albis;* E. subapicali *simillima, antennis autem minus late pectinatis, abdomine longiore, alis paullo angustioribus.*

Male. White. Body testaceous, with white tomentum. Antennæ with brown branches. Wings semidiaphanous, thinly clothed with very minute hairs; veins mostly white. Fore wings with the second inferior vein full thrice further from the third than from the first; third further from the fourth than from the second. Length of the body 6 lines; of the wings 16 lines.

This species is very nearly allied to *E. subapicalis*, but the antennæ are less deeply pectinated, the abdomen is longer, and the wings are rather narrower.

a. Parà. From Mr. Bates' collection.

4. ELORIA APICALIS.

Mas. *Alba, antice subtestacea; alæ subhyalinæ, anticæ apice et ad costam nigricantes.*

Male. White. Body testaceous, with white tomentum. Head and fore part of the thorax with testaceous hairs. Antennæ with brown branches. Wings semidiaphanous, thinly clothed with very minute hairs; veins white. Fore wings blackish along the costa and for nearly one-third of the length from the tips; second inferior vein about thrice further from the third than from the first; third much nearer to the second than to the fourth. Length of the body 5—6 lines; of the wings 15—20 lines.

a. Parà. From Mr. Bates' collection.
b, c. Parà. Presented by J. P. G. Smith, Esq.
d. Parà. Presented by Gordon Graham, Esq.

5. ELORIA MARGINALIS.

Mas. *Albida; caput, palpi et thorax anticus lutea; alæ latæ subhyalinæ, anticæ ad costam et apud apices late nigricantes, posticæ apice margineque postériore nigricantibus.*

Male. Whitish. Body testaceous, with whitish tomentum. Head, palpi and fore part of the thorax luteous. Antennæ hoary, with brown branches. Wings broad, semidiaphanous, thinly clothed with short hairs. Fore wings blackish along the costa to the fore border of the discal areolet, and obliquely for about one-third of the length from the tips; second inferior vein full thrice further from the third than from the first; third a little further from the fourth than from the second. Hind wings blackish at the tips and along the whole of the exterior border. Length of the body 5—6 lines; of the wings 16—18 lines.

a, b. Parà. Presented by Gordon Graham, Esq.
c. Parà. From Mr. Bates' collection.

6. ELORIA DIVISA.

Mas. *Albida; alæ subhyalinæ venis albis, anticæ sat angustæ dimidio apicali nigricante, posticæ apud marginem exteriorem nigricantes.*

Male. Whitish, with a slight testaceous tinge. Body testaceous, with whitish tomentum. Antennæ with brown branches. Wings semidiaphanous, thinly clothed with short hairs; veins

white. Fore wings rather narrow, blackish for almost half the length from the tips; the border of the blackish hue slightly undulating. Hind wings blackish along the middle part of the exterior border. Length of the body 5 lines; of the wings 14 lines.

a. ———? From Mr. Milne's collection.

Genus 27. CYPRA.

Mas. Corpus gracillimum. Palpi porrecti, graciles, breviusculi, caput vix superantes; articulus 2us 1o multo longior; 3us minimus, acuminatus. Antennæ late pectinatæ. Abdomen alas posticas non superans. Pedes gracillimi; tibiæ posticæ calcaribus quatuor mediæ longitudinis. Alæ latæ.

Cypra, *Boisd. Voyage de l'Astrolabe*, 201.

Male. Body very slender. Proboscis very short or obsolete. Palpi porrect, slender, rather short, hardly extending beyond the head; second joint very much longer than the first; third short, acuminated, very minute. Antennæ deeply pectinated, more than half the length of the body. Abdomen not extending so far as the hind wings. Legs very slender, bare; hind tibiæ with four moderately long spurs. Wings broad. Fore wings very slightly convex along the costa; second inferior vein nearer to the third than to the first; third full six times further from the fourth than from the second.

1. Cypra Eleuteria.

Mas. *Alba; caput supra flavescens; pedes antici fusco subvittati; alæ semihyalinæ, anticæ ad costam et apice fuscescentes, gutta basali costali nigra.*

Phalæna Eleuteria, *Stoll, Cram. Pap. Exot.* v. 163, pl. 36, f. 12.
Liparis Eleuteria, *Hübn. Verz. Schmett.* 158, 1645.

Male. White. Head above slightly tinged with yellow. Antennæ brown. Fore legs streaked with pale brown. Wings semidiaphanous, thinly clothed with very minute hairs; veins white. Fore wings pale brown on the costa and for one-fourth of the length from the tips; a black dot on the base of the costa. Length of the body 5—6 lines; of the wings 18—20 lines.

a. Ashanti. From the collection of the Wesleyan Missionary Society.
b—f. Sierra Leone. Presented by the Rev. D. F. Morgan.
g. ———? From Mr. Milne's collection.

2. CYPRA CROCIPES.

Alæ delicatulæ, albidæ, immaculatæ ; frons et pedes crocei.

Cypra crocipes, *Boisd. Faun. Ent. Mad. Bourb. et Maur.* 87, pl. 12, f. 2.

Madagascar.

3. CYPRA DELICATULA.

Alæ delicatulæ albæ subdiaphanæ ; anticæ ad basin punctis quatuor fuscis.

Cypra delicatula, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 201, 1, pl. 1, f. 3.

New Guinea.

Genus 28. CIMOLA.

Mas. Corpus gracillimum. Proboscis inconspicua. Palpi porrecti, brevissimi; articulus 3us minimus. Antennæ late pectinatæ; corporis dimidio multo longiores. Pedes graciles nudi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ latæ, posticæ abdomen longe superantes.

Male. Body very slender. Proboscis very short or obsolete. Palpi porrect, very short; third joint very minute. Antennæ deeply pectinated, much more than half the length of the body. Abdomen not extending near so far as the hind wings. Legs slender, bare; hind tibiæ with two minute apical spurs. Wings broad. Fore wings hardly convex along the costa; second inferior vein full thrice further from the third than from the first; third a little nearer to the fourth than to the second.

1. CIMOLA OPALINA.

Mas. *Testacea ; antennæ nigræ ; alæ viridulo-albæ venis fuscescentibus, anticæ apice fuscescentes.*

Male. Body piceous, with testaceous tomentum and hairs. Antennæ black. Wings greenish white; veins mostly brownish, except towards the base. Fore wings brownish for full one-fourth of the length from the tips. Length of the body 4 lines; of the wings 14 lines.

a. Port Natal. From Mr. Stevens' collection.

Genus 29. GENUSA.

Mas. Corpus gracillimum. Palpi porrecti, graciles, longiusculi, caput sat longe superantes; articulus 2us lo multo longior; 3us gracilis, lanceolatus. Antennæ late aut latissime pectinatæ, corporis dimidio longiores. Abdomen alas posticas non superans. Pedes gracillimi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ mediocriter latæ, anticæ ad costam subconvexæ.

Male. Body very slender. Proboscis very short or obsolete. Palpi porrect, slender, rather long, extending some distance beyond the head; second joint very much longer than the first; third slender, lanceolate. Antennæ deeply pectinated, more than half the length of the body. Abdomen extending nearly as far as the hind wings. Legs very slender; hind tibiæ with four rather long spurs. Wings moderately broad. Fore wings slightly convex along the costa; second inferior vein about thrice further from the third than from the first; third a little further from the fourth than from the second.

A. Abdomen nigro maculatum. - - - bigutta, *Walk.*
B. Abdomen non maculatum.
A. Alæ totæ supra albæ. - - - delineata, *Walk.*
B. Alæ supra cinereo variæ. - - - circumdata, *Walk.*

1. Genusa bigutta.

Mas. *Testacea; albo tomentosa; thorax albo bimaculatus; abdomen maculis dorsalibus nigris; pedes antici supra nigricantes; alæ albæ, anticæ gutta basali nigra.*

Male. White. Body testaceous, with white tomentum. Thorax with a white spot on each side in front. Abdomen with a dorsal row of black spots. Fore legs blackish above. Wings opaque, squamose, not plumose. Fore wings with a black dot on each side at the base. Length of the body 5 lines; of the wings 16 lines.

a. North India. From Mr. James' collection.
East Indies. From Archdeacon Clerk's collection.

2. Genusa delineata.

Mas. *Lutea; thorax albus, antice luteus; abdomen basi album; alæ subtus nigro variæ.*

Male. White. Body luteous. Thorax white, luteous in front. Abdomen white towards the base. Fore wings beneath blackish along the costa, and with blackish streaks proceeding from the disk to the exterior border; second inferior vein about twice further from the third than from the first; third more than twice further from the fourth than from the second. Hind wings blackish on nearly half of the exterior part, with the exception of the white veins. Length of the body 6 lines; of the wings 18 lines.

a, *b*. Silhet. Presented by E. Doubleday, Esq.

3. GENUSA CIRCUMDATA.

Mas. *Alba; caput, abdomen apice et pedes subtestacea; antennæ latissime pectinatæ; alæ cinereo ex parte marginatæ.*

Male. White. Head, palpi, abdomen towards the tips and legs slightly testaceous. Antennæ very deeply pectinated; branches black. Fore wings gray along the costa and along the exterior border, where a gray streak proceeds to the disk; second inferior vein about twice further from the third than from the first; third full thrice further from the fourth than from the second. Hind wings gray at the tips, and along the exterior border. Length of the body 6 lines; of the wings 16 lines.

a, *b*. North India. From Mr. Stevens' collection.

Genus 30. PANTANA.

Mas. Corpus gracillimum. Proboscis inconspicua. Palpi porrecti, breviusculi, caput non superantes; articulus 2us 1o multo longior; 3us acutus, minimus. Antennæ late pectinatæ, corporis dimidio æquales. Abdomen apice fasciculatum. Pedes gracillimi, nudi; tibiæ posticæ calcaribus duobus apicalibus longis. Alæ anticæ sat angustæ; posticæ latissimæ, abdomen longe superantes.

Male. Body very slender. Proboscis very short or obsolete. Palpi porrect, rather short, not extending beyond the head; second joint much longer than the first; third acute, very minute. Antennæ deeply pectinated, about half the length of the body. Abdomen somewhat tufted at the tip, extending to about half the breadth of the hind wings. Legs very slender, bare; hind tibiæ with four long apical spurs. Fore wings rather narrow, slightly convex along the costa; second inferior vein as near to the third as to the first; third about twice further from the fourth than from the second. Hind wings very broad.

1. Pantana dispar.

Mas. *Alba; caput et thorax anticus pallide lutea; alæ anticæ angustæ, apud costam subtestaceæ, striga discali irregulari apiceque fuscis, subtus antice luteæ.*

Male. White. Head and fore part of the thorax pale luteous. Fore wings slightly testaceous in front, with an irregular brown streak in the disk; tips and the adjoining part of the exterior border pale brown; under side bright luteous in front, dark brown at the tips. Length of the body 5½ lines; of the wings 18 lines.

a. East Indies. From Archdeacon Clerk's collection.

Note.—This and the two following insects have much mutual resemblance, and may prove to be varieties of one species.

2. Pantana bicolor.

Mas. *Testacea; alæ anticæ subfuscæ, mediocriter latæ, venis albis; posticæ latæ, albæ.*

Male. Body and legs testaceous. Fore wings moderately broad, very pale, brown, a little darker towards the tips and along the exterior border than elsewhere; veins white; second inferior vein almost four times further from the third than from the first; third as far from the fourth as from the second. Hind wings broad, white. Length of the body 6 lines; of the wings 20 lines.

a. ———? From Mr. Children's collection.

3. Pantana ampla.

Mas. *Testacea; antennæ nigræ; palpi et pedes albidi; alæ albæ, anticæ plus dimidio basali costam versus supra testaceo subtus luteo, apice fuscæ.*

Male. Testaceous: Antennæ black, whitish above. Palpi and legs whitish. Wings white. Fore wings testaceous above, and luteous beneath, for two-thirds of the length from the base, and on half the breadth; tips brown. Length of the body 5 lines; of the wings 16 lines.

a. Hong Kong. Presented by Lieut.-Col. Champion.

Genus 31. PENORA.

Mas. Corpus gracillimum. Proboscis brevissima. Palpi porrecti, graciles, nudi, longiusculi, caput superantes; articulus 2us 1o duplo longior; 3us lanceolatus, 1o brevior. Antennæ late pectinatæ, corporis dimidio paullo longiores. Pedes gracillimi, longiusculi, fere nudi; tibiæ posticæ calcaribus duobus mediocriter longis. Alæ latæ; posticæ abdomen fere superantes.

Male. Body very slender. Proboscis very short. Palpi porrect, slender, bare, rather long, extending some distance beyond the head; second joint about twice the length of the first; third lanceolate, shorter than the first. Antennæ deeply pectinated, rather more than half the length of the body. Abdomen hardly extending so far as the hind wings. Legs very slender, rather long, almost bare; hind tibiæ with two moderately long spurs. Wings broad. Fore wings slightly convex along the costa, rounded at the tips; second inferior vein about thrice further from the third than from the first; third much further from the fourth than from the second; four inferior veins; first, second and fourth simple; second convex, touching in its bend the hind fork of the third, which fork forms two branches near the tip of the wing.

South America.

1. PENORA REMOTA.

Mas. *Alba; alæ semihyalinæ, rarissime pilosæ, venis albis.*

Male. White. Body and legs testaceous, with white tomentum. Wings semihyaline, very thinly pilose; veins white. Length of the body 6 lines; of the wings 18 lines.

a. West Coast of America. Presented by Capt. Wood and Lieut. Wood.

2. PENORA FESTIVA.

Mas. *Albida; caput, palpi et thorax anticus testacea; antennæ latissime pectinatæ; abdomen vitta dorsali fusca; pedes anteriores intus fusci; alæ semihyalinæ, rarissime pilosæ, venis fuscis.*

Phalæna festiva, *Cram. Pap. Exot.* i. 112, pl. 71, f. C.
Liparis spectra, *Hübn. Lep.* iii. *Phalænæ* 2. *Veræ* 2. *Hypogymnæ* A. *subsquammatæ* 1, f. 1—4. *Verz. Schmett.* 158, 1647.

Male. Whitish. Head, palpi and fore part of the thorax testaceous. Antennæ very deeply pectinated. Abdomen with a slender brown dorsal stripe. Anterior legs brown on the inner side. Wings semihyaline, very thinly pilose; veins mostly brown. Length of the body 5—6 lines; of the wings 16—20 lines.

a. Brazil. From Mr. Argent's collection.
b. Brazil. From Mr. Swainson's collection.

This may be a variety of *P. venosa.*

3. Penora? Diaphana.

Albida; alæ semihyalinæ.

Phalæna Bombyx Diaphana, *Cram. Pap. Exot.* iv. 135, pl. 360, f. A.

Liparis Diaphane, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Hypogymniæ Subsquammatæ*) 158, 1646.

Whitish. Wings semihyaline.

Surinam.

East Indies.

4. Penora venosa.

Mas. *Alba; caput, palpi et thorax anticus lutea; abdomen vitta dorsali fusca; pedes anteriores intus fuscescentes; alæ semihyalinæ, rarissime pilosæ, venis fuscis.*

Male. White. Head, palpi and fore part of the thorax pale luteous. Abdomen with a slender brown dorsal stripe. Anterior legs mostly brown on the inner side. Wings semihyaline, very thinly pilose; veins brown. Length of the body 6—8 lines; of the wings 18—22 lines.

a. North India. From Mr. L. James' collection.
b—g. ——— ?

Genus 32. DEROCA.

Mas. Corpus gracillimum. Proboscis brevissima. Palpi porrecti, graciles, nudi, mediocriter longi, caput paullo superantes; articulus 2us lo multo longior; 3us lanceolatus, 1o brevior. Antennæ late pectinatæ. Abdomen alas posticas non superantes. Alæ latæ, hyalinæ, nudæ.

Male. Body very slender. Proboscis very short. Palpi porrect, slender, bare, moderately long, extending a little beyond the head; second joint much longer than the first; third lanceolate, shorter than the first. Antennæ deeply pectinated. Abdomen not extending beyond the hind wings. Legs very slender; hind tibiæ with four moderately long spurs. Wings broad, hyaline, quite bare. Fore wings hardly convex along the costa, rounded at the tips; second inferior vein about four times further from the third than from the first, which is curved; third almost twice further from the fourth than from the second.

1. DEROCA HYALINA.

Mas. *Albida; alæ limpidæ, venis albidis.*

Male. Body blackish; legs testaceous; both with whitish tomentum. Wings colourless; veins whitish. Length of the body 5 lines; of the wings 18 lines.

a. Himalaya Mountains. From Mr. Leadbeater's collection.

Genus 33. OLAPA.

Mas. Corpus sat gracile. Caput et thorax dense pilosa. Proboscis brevissima. Palpi pilosi, brevissimi, caput non superantes; articulus 3us minimus. Antennæ latissime pectinatæ, corporis dimidio multo longiores. Pedes graciles; tibiæ posticæ calcaribus duobus apicalibus mediocriter longis. Alæ latæ; posticæ abdomen superantes.

Male. Body rather slender. Head and thorax thickly clothed with hairs. Proboscis very short. Palpi pilose, very short, not extending beyond the head; third joint very small. Antennæ very deeply pectinated, much more than half the length of the body. Abdomen not extending so far as the hind wings. Legs slender; hind tibiæ with moderately long apical spurs. Wings broad. Fore wings very slightly convex along the costa, rounded at the tips; second inferior vein full four times further from the third than from the first; third not further from the fourth than from the second.

1. OLAPA TEMPERATA.

Mas. *Albida; caput subtestaceum; alæ sublimpidæ, vix pubescentes, venis albidis.*

Liparis crocicollis? *Boisd.* See p. 794.

Male. Body, antennæ and legs testaceous, with whitish hairs or tomentum. Head slightly testaceous. Antennæ with brown branches. Wings nearly limpid, very thinly clothed with minute pubescence; veins whitish. Length of the body 7 lines; of the wings 20 lines.

a. South Africa. From M. Becker's collection.

Genus 34. RICINE.

Mas. Corpus pilosum, sat gracile. Palpi porrecti, valde pilosi, caput paullo superantes; articulus 2us 1o longior, 3us parvus, lanceolatus. Antennæ subpectinatæ. Abdomen alas posticas non superans. Pedes sat graciles, pilis longissimis vestiti; tibiæ posticæ calcaribus quatuor longis. Alæ sat angustæ; anticæ apud costam convexæ, apice vix angulatæ.

Male? Body rather slender, pilose. Palpi porrect, very pilose, not long, extending a little beyond the head; second joint longer than the first; third small, lanceolate. Antennæ minutely pectinated, about half the length of the body. Abdomen not extending beyond the hind wings. Legs rather slender, clothed with very long hairs; hind tibiæ with four long spurs. Wings rather narrow. Fore wings convex along the costa, hardly angular at the tips, oblique and slightly convex along the exterior border; second inferior vein as near to the third as to the first; third about twice further from the fourth than from the second.

1. Ricine suffusa.

Testacea; thorax postice albus; femora tibiæque posteriora albo pilosa; alæ posticæ albæ.

Testaceous. Antennæ white, with tawny branches. Hind part of the thorax with white hairs. Posterior femora and tibiæ mostly white. Hind wings white. Length of the body 4½ lines; of the wings 13 lines.

a. Java. From the East India Company's collection.

Genus 35. CAVIRIA.

Mas. Corpus gracillimum. Palpi breves, nudi, caput non superantes; articulus 2us 1o multo longior; 3us parvus, conicus, acuminatus. Antennæ late pectinatæ, breviusculæ. Abdomen alas

posticas non superans. Pedes graciles, subnudi; tibiæ anticæ subciliatæ, posticæ calcaribus duobus minutis apicalibus. Alæ latæ; anticæ apud costam vix convexæ, apice subacuminatæ.

Male. Body very slender. Proboscis very short or obsolete. Palpi short, bare, not extending beyond the head; second joint much longer than the first: third minute, conical, acuminated. Antennæ deeply pectinated, hardly more than one-third of the length of the body. Abdomen not extending so far as the hind wings. Legs slender, almost bare; fore tibiæ slightly ciliated; hind tibiæ with two minute apical spurs. Wings broad. Fore wings hardly convex in front, slightly acuminated at the tips; second inferior vein thrice further from the third than from the first; third as far from the second as from the fourth. Hind wings slightly acuminated at the interior angle.

This genus much resembles *Redoa*.

1. CAVIRIA SUBSTRIGOSA.

Mas. *Alba; alæ argenteo-albæ, anticæ fasciis duabus obliquis micantibus.*

Male. White. Body and legs testaceous, with white hairs and tomentum. Wings silvery white. Fore wings with two oblique more shining bands, composed of elevated scales. Length of the body 5 lines; of the wings 14 lines.

a—c. Brazil.

Genus 36. CROPERA.

Mas. Corpus sat gracile. Palpi porrecti, sat graciles, valde pilosi, caput paullo superantes; articulus 2us 1o multo longior; 3us parvus, acutus. Antennæ pectinatæ, thorace vix longiores. Abdomen alas posticas non superans. Pedes gracillimi, vix pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ latæ, semihyalinæ.

Male. Body rather slender. Palpi porrect, rather slender, very pilose, extending a little beyond the head; second joint much longer than the first; third small, acute. Antennæ pectinated, hardly longer than the thorax; branches short. Abdomen extending nearly as far as the hind wings. Legs very slender; femora slightly hairy; tibiæ and tarsi almost bare; hind tibiæ with four long spurs. Wings broad, semihyaline, very thinly clothed with hairs. Fore wings hardly convex along the costa, rounded at the tips, oblique

and hardly convex along the exterior border; interior angle obtuse and somewhat rounded; first and second inferior veins contiguous at the base; third about thrice further from the fourth than from the second.

1. Cropera testacea.

Mas. *Testacea; caput, thorax antice, et alæ apud costam sublutea; alæ anticæ litura discali nigricante.*

Male. Testaceous. Head, fore part of the thorax, and wings along the costa somewhat luteous. Fore wings with a blackish mark at the tip of the discal areolet. Length of the body 6—7 lines; of the wings 16—18 lines.

Port Natal. In Mr. Saunders' collection.

Genus 37. REDOA.

Mas. Corpus pilosum, mediocriter validum. Proboscis brevissima. Palpi porrecti, crassi, longiusculi, per obtusi, caput superantes; articulus 2us 1o plus duplo longior; 3us vix conspicuus. Antennæ latissime pectinatæ. Abdomen alas posticas non superans. Pedes sat graciles, vix pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ subacuminatæ.

Male. Body pilose, moderately stout. Proboscis very short. Palpi porrect, thick, very obtuse, rather long, extending some distance beyond the head; second joint more than twice the length of the first; third almost obsolete. Antennæ very deeply pectinated. Abdomen not extending beyond the hind wings. Legs rather slender, hardly pilose; hind tibiæ with four long spurs. Wings moderately broad. Fore wings acuminated; second inferior vein very little nearer to the third than to the first; third almost twice further from the fourth than from the second.

A. Caput fusco maculatum. - - - submarginata, *Walk.*
B. Caput non maculatum.
A. Alæ venis albis. - - - - - micans, *Walk.*
B. Alæ venis nigricantibus. - - - argentea, *Walk.*

1. Redoa submarginata.

Mas. *Alba; vertex fusco maculatus; palpi apice fusci; pedes anteriores nigro maculati; alæ argenteæ scintillantes, subtus fusco vix marginatæ, anticæ gutta discali nigra.*

Male. White. Head with brown spots on the vertex. Palpi with brown tips. Femora, tibiæ and tarsi of anterior legs with a black spot on each. Wings silvery white, shining, slightly bordered with brown beneath. Fore wings with iridescent scales, and with a black dot at the tip of the discal areolet. Length of the body 5—7 lines; of the wings 14—18 lines.

a, *b*. Silhet. From the Rev. J. Stainforth's collection.
c. East Indies. From Archdeacon Clerk's collection.
d. Ceylon. Presented by R. Templeton, Esq.
e. Ceylon. From the Rev. J. Wenham's collection.

2. REDOA MICANS.

Mas. *Alba; alæ argenteæ venis albis, anticæ costa testacea.*

Male. Body, antennæ and legs testaceous, with white tomentum. Wings silvery white; veins white. Fore wings with the costa testaceous; ciliæ sometimes slightly testaceous above. Length of the body 5—7 lines; of the wings 14—18 lines.

Brazil.

a, *b*. ———? From Mr. Milne's collection.

The leaf which shelters the pupa is fastened together by a few silky threads.

3. REDOA ARGENTEA.

Mas. *Alba; antennæ obscure fuscæ; alæ argenteæ, venis nigricantibus.*

Male. Body and legs testaceous, clothed with white hairs. Antennæ dark brown. Wings silvery white; veins mostly blackish. Length of the body 7 lines; of the wings 16 lines.

a. Assam. From Mr. Warwick's collection.

Genus 38. LÆLIA.

Thorax sat gracilis. Palpi longi, porrecti, subtus ciliati, caput sat longe superantes; articulus 2us 1o multo longior; 3us lanceolatus, 1o brevior. Abdomen alas posticas paullo superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ vix latæ, parum vestitæ. *Mas.*—Antennæ latissime pectinatæ, corporis dimidio longiores. Abdomen gracilius. *Fœm.*—Antennæ subpectinatæ, corporis dimidio breviores. Abdomen mediocriter robustum.

Lælia, *Steph. Ill. Brit. Ent. Haust.* ii. 62.
Bombyx, p., *Hübn. Bomb.*
Laria, *Hübn. Verz. Schmett.*
Arctia, p., *Curt.*
Leucoma, *Hübn.*
Orgya, p., *Boisd.*

Thorax rather slender. Palpi long, porrect, ciliated beneath, extending some distance beyond the head; second joint much longer than the first; third lanceolate, shorter than the first. Abdomen extending a little beyond the hind wings. Legs moderately stout; hind tibiæ with four rather long spurs. Wings hardly broad, thinly clothed; second inferior vein a little further from the third than from the first; third nearly twice further from the fourth than from the second. *Male.*—Antennæ very deeply pectinated, more than half the length of the body. Abdomen rather slender. *Female.*—Antennæ minutely pectinated, less than half the length of the body. Abdomen moderately stout.

A. Albo nigroque varia. - - - cænobita, *Herr.-Schæff.*
B. Rufescente-cinerea (*mas*) aut albida (*fœm.*); pedes non annulati. cænosa, *Hübn.*

1. LÆLIA CÆNOBITA.

Albo nigroque varia, ciliis in venis albis, alarum anticarum maculis orbiculari et reniformi, lineis duabus transversis et undulatis, omnibus acutissime dentatis albis.

Lælia cænobita, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 137, 24, 1.

Europe.

2. LÆLIA CÆNOSA.

Alæ maris *pallidè ochraceo-fuscæ, striga postica punctorum obsoletorum fuscorum;* fœm. *albæ, immaculatæ; palpi et pedes lutei.*

Lælia cænosa, *Steph. Ill. Brit. Ent. Haust.* ii. 63, 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 138, 25, 2.
Bombyx cænosa, *Hübn. Bomb.* pl. 51, f. 218.
Arctia cænosa, *Curt. Brit. Ent.* ii. pl. 68.
Laria cænosa, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Albæ*) 159, 1659.
Orgya cænosa, *Boisd. Gen. et Ind. Lepid.* 67.

Liparis cænosa, *Boisd. Ind. Meth. Lep. Eur. Freyer, Neure Lep. Lep. Brit.* ii. 34, pl. 202, f. 116.

a—f. Whittlesea Mere. Presented by Mr. Foxcroft.
g—n. Whittlesea Mere. From Mr. Stephens' collection.
o, p. Europe. From M. Becker's collection.

3. Lælia Sinensis.

Mas et fœm. *Albida, vix subtestacea; palpi testacei, apice albidi; antennæ fuscæ, supra albæ; alæ posticæ albæ.* Mas. *—Abdomen supra fuscum.*

Male and fem. Whitish, with a slight testaceous tinge. Palpi testaceous, with whitish tips. Antennæ brown, white above. Hind wings white. *Male.*—Abdomen pale brown above. Length of the body 5 lines; of the wings 14—15 lines.

a, b. Hong Kong. Presented by Lieut.-Col. Champion.

Genus 39. LEUCOMA.

Corpus sat gracile, subpilosum. Proboscis brevissima. Palpi porrecti, sat validi, subpilosi, caput non superantes; articulus 2us 1o multo longior; 3us minutus, conicus, acutus. Abdomen alas posticas non superans. Pedes sat graciles, vix pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ latæ. *Mas.*—Antennæ latissime pectinatæ. *Fœm.*—Antennæ late pectinatæ.

Leucoma, *Steph. Ill. Brit. Ent. Haust.* ii. 64.
Bombyx, p., *Fabr.; Borkh.; Esp.; Hübn.; Haw.; God.*
Phalæna-Bombyx, p., *Gmel.*
Liparis, p., *Ochs.*
Laria, p., *Hübn.; Meig.*
Arctia, p., *Curt.*
Orgya, p., *Boisd. Gen. et Ind. Lépid.* 67.
Lælia, p., *Herr.-Schæff.*

Body rather slender, slightly hairy. Proboscis very short. Palpi porrect, rather stout, slightly hairy, not or hardly extending beyond the head; second joint much longer than the first; third minute, conical, acute. Abdomen not extending beyond the hind wings. Legs rather slender, hardly pilose; hind tibiæ with four long spurs. Wings broad, very slightly pilose. Fore wings almost straight along the costa, rounded at the tips; second inferior vein more than twice further from the third than from the first, to which it is very near; third nearly or much more than twice further from the fourth than from the second. *Male.*—Antennæ very deeply pectinated. *Female.*—Antennæ deeply pectinated.

Europe.

1. Leucoma Vau-nigra.

Alæ niveæ; anticæ vena transversa nigra; pedes antici nigro annulati.

Leucoma Vau-nigra, *Steph. Ill. Brit. Ent. Haust.* ii. 64, 1, pl. 16, f. 2.
Phalæna-Bombyx V-nigrum, *Gmel. ed. Syst. Nat.* i. 5, 2436, 571.
Bombyx nivosa, *Wien. Verz.* 52, D. 1. *Borkh. Schmett.* iii. 290, 109. *Hübn. Bomb.* pl. 18, f. 71; *Larv. Lep.* iii. *Bomb.* ii. *Veræ.* C. b. f. 2.
Bombyx V-Nigrum, *Fabr. Ent. Syst.* iii. 1, 458, 159. *Oliv. Enc. Méth.* v. 80, 192. *Esp. Schmett.* iii. pl. 40. *God. Pap. de France*, iv. 268, pl. 27, f. 1. *Freyer, Beitr.* pl. 21.
Bombyx nivosa, *Hübn. Bomb.* pl. 18, f. 71.
Bombyx V-niger, *Haw. Lep. Brit.* 107.
Arctia V-nigra, *Curt. Brit. Ent.* 68.
Lælia V-nigrum, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 138, 26, 3.
Laria nivosa, *Hübn.* (*Phalænæ Veræ Leucomæ Albæ*), 159, 1656. *Meig. Handb.* 123, 49, pl. 10, f. 5.
Leparis V-nigrum, *Ochs. Schmett.* iii. 200, 7; iv. 55, 7.
Laria V-nigrum, *Meig. Syst. Beschr. Eur. Schmett.* iii. 5, 4, pl. 81, f. 4.

Palpi extending a little beyond the head. Third inferior vein of the fore wings much more than twice further from the fourth than from the second.

a. England? From Mr. Stephens' collection.
b. England?
c—f. Europe. From M. Becker's collection.
g, *h*. Europe. From Mr. Milne's collection.

Africa.

2. Leucoma dealbata.

Alba; caput luteum; pedes anteriores nigro vittati; alarum venæ albæ, disco et apud marginem exteriorem nigro strigatæ.

Liparis dealbata, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 24, f. 111.

White. Head bright luteous. Palpi not extending beyond the head. Anterior legs striped with black on the inner side. Veins white, streaked with black in the fore wings at the tip of the

discal areolet, and along the exterior border and by the interior border; third inferior vein of the fore wings nearly twice further from the fourth than from the second. *Female.*—Abdomen with two black dots on each side beneath at two-thirds of the length. Length of the body 7—8 lines; of the wings 18—20 lines.

a—c. South Africa. Presented by Dr. A. Smith.
d, e. Port Natal. From Dr. Krauss' collection.
f. South Africa. From M. Becker's collection.
g. Port Natal. From M. Gueinzius' collection.

South America.

3. Leucoma? Nivea.

Alba; alæ posticæ maculis tribus posticis fulvis.

Phalæna-Bombyx Nivea, *Cram. Pap. Exot.* iv. 65, pl. 321, f. B.
Laria candida, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Albæ*), 159, 1657.

White. Hind wings with three tawny spots extending in a line along the exterior border from the interior angle.

Surinam.

Asia.

4. Leucoma latifascia.

Fœm. *Alba; antennæ ramis testaceis; abdomen fuscum, basi album, apice luteum.*

Fem. White. Antennæ with testaceous branches. Abdomen brown, white at the base, luteous at the tip. Length of the body 6 lines; of the wings 20 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.

Genus 40. EUPROCTIS.

Mas et fœm. Corpus sat validum, valde pilosum. Palpi breves, decumbentes, pilosi, caput non superantes; articulus 2us lo multo longior; 3us parvus, conicus. Abdomen alas posticas non superans. Pedes sat graciles, pilis longissimis hirti; tibiæ posticæ calcaribus quatuor longis. Alæ latæ. *Mas.*—Antennæ late pectinatæ. Abdomen apice fasciculatum. *Fœm.*—Antennæ mediocriter pectinatæ. Abdomen apice dense lanuginosum.

Phalæna-Bombyx, p., *Linn.; Gmel.*
Bombyx, p., *Fabr.; Borkh.; Esp.; Donov.; Hübn.; Haw.; God.*

Euproctis, *Hübn.*; *Steph.*
Laria, p., *Meig.*
Arctia, p., *Latr.*; *Leach*; *Curt.*
Liparis, p., *Ochs.*; *Boisd.*
Porthesia, *Steph.*; *Westw.*; *Herr.-Schæff.*

Body moderately stout, very pilose. Proboscis very short. Palpi short, decumbent, pilose, not extending beyond the head; second joint much longer than the first; third minute, conical. Abdomen hardly extending as far as the hind wings. Legs rather slender, ciliated with very long hairs; hind tibiæ with four long spurs. Wings broad. Fore wings hardly convex along the costa, rounded at the tips; second inferior vein more than twice further from the third than from the first, to which it is almost contiguous; third more than thrice further from the fourth than from the second. *Male.*—Antennæ deeply pectinated. Abdomen thickly tufted at the tip, more slender than that of the female. *Female.*—Antennæ moderately pectinated. Abdomen very thickly woolly at the tip.

1. EUPROCTIS AURIFLUA.

Alba; antennæ luteo-fulvo pectinatæ; abdomen apice luteum; alarum anticarum margo interior ciliis longissimis.

Euproctis auriflua, *Hübn. Verz. Schmett.* *Steph. Cat. Brit. Lepid.* 52, 2.

Bombyx auriflua, *Fabr. Ent. Syst.* iii. 459, 161. *Wien. Verz.* 52, D. 4. *Borkh. Schmett.* iii. 298, 112. *Esp. Schmett.* iii. pl. 39, f. 1, 2, 7. *Oliv. Enc. Méth.* v. 82, 196. *Hübn. Bomb.* pl. 18, f. 68, 69; *Larv. Lep.* iii. *Bomb.* ii. *Veræ.* C. a. f. 2 a—c. *God. Pap. de France*, iv. 276, pl. 27, f. 4.

Phalæna auriflua, *Gmel. ed. Syst. Nat.* i. 5, 2423, 527.

——— ———, *List. Goëd.* (Angl.) 86, f. 90; (Lat.) 206, f. 90. *Albin, Nat. Hist. Engl. Ins.* pl. 87, f. e—i. *Harr. Aur.* pl. 25, f. p—s. *V. M.* 47. *Roës. Ins.* i. pl. 22.

Phalæna chrysorrhæa, *Wilkes*, 28, pl. 59.

Arctia auriflua, *Latr. Nouv. Dict. d'Hist. 2nd Edit.*

Arctia chrysorrhæa, *Curt. Brit. Ent.* ii. 68.

Euproctis auriflua, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Albæ*), 159, 1660.

Liparis auriflua, *Ochs. Schmett.* iii. 205, 9; iv. 55, 9. *Otto Brehmer und W. Grey, Beit. Schmett. Noerd China*, 73.

Laria auriflua, *Meig. Handb.* 123, 51; *Syst. Beschr. Eur. Schmett.* iii. 4, 2, pl. 81, f. 2.

Mas. Bombyx aurifluus, *Haw. Lep. Brit.* 108.

Fœm. Bombyx chrysorrhæus, *Haw. Lep. Brit.* 108.

Porthesia chrysorrhæa, *Steph. Ill. Brit. Ent. Haust.* ii. 65. *Westw. and Humph. Brit. Moths*, i. 90, pl. 18, f. 7, 8.
Porthesia auriflua, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 136, 19, 1. *Speyer, Ent. Zeit. Stett.* xiii. 319, 17.

a—c. England. From Mr. Foxcroft's collection.
d—r. England. From Mr. Stephens' collection.
s—v. England.
u, w. Europe. From M. Becker's collection.

2. EUPROCTIS CHRYSORRHÆA.

Alba; antennæ ferrugineo pectinatæ; abdomen apice fulvum aut fuscum; alarum anticarum margo interior ciliis abbreviatis.

Phalæna-Bombyx chrysorrhæa, *Linn. Syst. Nat.* ii. 822. *Faun. Suec.* 1128. *Gmel. ed. Syst. Nat.* i. 5, 2422, 45. *Berk. Syst.* i. 136. *Don. Nat. Hist. Brit. Ins.* i. pl. 10. *Stew. El. Nat. Hist.* ii. 150. *Turt. Syst. Nat.* iii. 217.
Bombyx chrysorrhæa, *Fabr. Ent. Syst.* iii. 1, 458, 160. *Wien. Verz.* 52, D: 3. *Borkh. Schmett.* iii. 295, 111. *Oliv. Enc. Méth.* v. 81, 195. *Hübn. Bomb.* pl. 18, f. 67; pl. 58, f. 248, 249; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, C. a. f. 1, a—c. *God. Pap. de France*, iv. 273, pl. 27, f. 3.
Liparis chrysorrhæa, *Ochs. Schmett.* iii. 202, 8; iv. 55, 8.
Laria chrysorrhæa, *Meig. Handb.* 123, 50; *Syst. Beschr. Eur. Schmett.* iii. 3, 1, pl. 81, f. 1.
Phalæna-Bombyx phæorrhæa, *W. Curtis on Brown-tail Moth. Don. Nat. Hist. Brit. Ins.* x. 4, pl. 555.
——— ———, *Albin, Nat. Hist. Engl. Ins.* pl. 87, f. a—d. *Roës. Ins.* i. pl. 21.
Bombyx phæorrhæus, *Haw. Lep. Brit.* 109.
Arctia phæorrhæa, *Leach, Edin. Encycl.* ix. 133; *Curt. Brit. Ent.* ii. pl. 6, 8.
Porthesia auriflua, *Steph. Ill. Brit. Ent. Haust.* ii. 66, 2.
Porthesia chrysorrhæa, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 136, 20, 2. *Speyer, Ent. Zeit. Stett.* xiii. 319, 16.
Euproctis chrysorrhæa, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Albæ*), 160, 1661. *Steph. Cat. Brit. Lep.* 52, 1.

a—k. England. From Mr. Stephens' collection.
l. England. From Mr. Foxcroft's collection.
m—o. England.
p—r. Europe. From M. Becker's collection.

North America.

3. EUPROCTIS TEXTOR.

Candida; antennæ fuscæ; coxæ et femora antica lutea; tibiæ tarsique antica fusca. Mas.—*Abdomen luteum; fœm. abdomen subtestaceum.*

Hyphantia textor, *Harris, Nat. Hist. Ins. Mass.*

Pure white. Antennæ brown, with white tomentum. Fore coxæ and fore femora luteous; fore tibiæ and fore tarsi mostly brown. *Male.*—Abdomen luteous. *Female.*—Abdomen with a very slight testaceous tinge. Length of the body 4—4½ lines; of the wings 11—12 lines.

a—c. Georgia. From Mr. Abbot's collection.

South America.

4. EUPROCTIS? SUBACTA.

Mas. *Flavido-alba; antennæ ramis fuscis; alæ anticæ striga obliqua pallide fusca.*

Male. Yellowish white. Body slender. Palpi slender, extending very little beyond the head; first joint short; third minute, acute-conical. Antennæ moderately pectinated, with brown branches. Abdomen not extending so far as the hind wings. Legs slender; hind legs wanting. Wings broad. Fore wings very slightly convex in front, rounded at the tips; exterior border slightly oblique; a slightly oblique pale brown discal mark; first and second inferior veins contiguous at the base; third as far from the second as from the fourth. Length of the body 6 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

5. EUPROCTIS? OVINA.

Mas et fœm. *Alba; abdominis suturæ luteæ; alæ anticæ costa subtus nigra.*

Phalæna-Bombyx ovina, *Anon. Ins. Surin.* 233, pl. 105.

Surinam.

* This may be one of the *Arctiidæ*. The larva feeds on *Paniscum plicatum*.

Asia.

A. Abdomen non fasciatum.
A. Alæ non nigro fasciatæ.
a. Alæ posticæ fusco non adspersæ.
a. Alæ anticæ non luteæ. - - - divisa, *Walk.*
i. Alæ macula nulla discali.
* Alæ subtus albæ. - - - - antica, *Walk.*
** Alæ subtus cinereæ aut nigricantes.
virguncula, *Walk.*
ii. Alæ macula discali nigra.
* Macula magna. - - - bimaculata, *Walk.*
** Macula parva. - - - - bigutta, *Walk.*
b. Alæ luteæ aut testaceæ.
i. Alæ gutta rotunda. - - - lutescens, *Walk.*
ii. Alæ macula arcuata. - - - - lunata, *Walk.*
B. Alæ anticæ fusco conspersæ aut rufescentes.
atomaria, *Walk.*
c. Alæ posticæ fusco adspersæ. - xanthorrhæa, *Kollar.*
B. Alæ anticæ nigro fasciatæ. - - - vitellina, *Kollar.*
B. Abdomen fasciatum. - - - - chrysolopha, *Kollar.*

6. Euproctis antica.

Mas et fœm. *Alba; caput, palpi, thorax antice pedesque antici* maris *lutea*, fœminæ *testacea; costa subtestacea.* Fœm.—*Abdomen et alæ anticæ vix subtestacea.*

Male and female. White. Head, palpi, fore part of the thorax and fore legs luteous in the male, testaceous in the female. *Female.*—Abdomen and fore wings with a very slight testaceous tinge. Length of the body 5—7½ lines; of the wings 12—18 lines.

Var. β. Whitish. Palpi and fore legs in the inner side somewhat luteous. Antennæ with tawny branches. Abdomen luteous at the tip. *Male.*—Wings with a slight testaceous tinge, especially about the borders.

Var. γ. *Male.* Fore wings fawn-colour along the costa.

Var. δ. *Fem.* Fore wings, excepting the fore border, slightly flecked with brown for about half the length from the base.

a—c. Nepaul. Presented by Major-Gen. Hardwicke.
d. Hong Kong. Presented by J. C. Bowring, Esq.
e. Nepaul. Presented by E. Doubleday, Esq.
f—i. North India. From Mr. Stevens' collection.
j—o. North India. From Mr. James' collection.
p, q. East Indies. From Archdeacon Clerk's collection.

7. EUPROCTIS DIVISA.

Mas et fœm. *Alba; antennæ ramis testaceis aut fuscis; abdomen nigrum, apice luteum aut fulvum; alæ argenteo-albæ.*

Male and female. White. Antennæ with testaceous or brown branches. Abdomen occasionally black, luteous or tawny at the tip. Wings silvery white. Length of the body 5 lines; of the wings 12—16 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.
b. Punjaub. Presented by General Hearsay.
c, *d*. Silhet. Presented by E. Doubleday, Esq.
e. North India. Presented by W. W. Saunders, Esq.

8. EUPROCTIS VIRGUNCULA.

Mas et fœm. *Candida; antennæ ramis fuscis; abdomen apice luteum; alæ anticæ subtus nonnunquam plus minusve fuscæ aut cinereo-fuscæ, posticæ nonnunquam ad costam fuscæ.*

Male and fem. Pure white. Abdomen tufted at the tip with luteous hairs. Fore wings brown along the costa beneath. *Male.*—Antennæ rather short, not deeply pectinated, with brown branches. Legs slightly streaked with black. Length of the body 4—5 lines; of the wings 9—14.

Var. β. Fore wings wholly white beneath.

Var. γ. Fore wings and hind wings with brown disks beneath. Hind wings brown in front above.

Var. δ. Fore wings beneath and hind wings above and beneath mostly grayish brown.

Var. ε. Fore wings with a small black subcostal spot at three-fourths of the length.

a—*c*. Punjaub. Presented by General Hearsay.
d, *e*. Ceylon. Presented by R. Templeton, Esq.
f, *g*. East Indies. From Archdeacon Clerk's collection.
h. North India. From Mr. Stevens' collection.

9. EUPROCTIS BIMACULATA.

Mas. *Alba; antennæ ramis fuscis; abdomen apice fuscum; alæ anticæ macula costali atra.*

Male. White. Antennæ with brown branches. Abdomen with brown hairs at the tip. Fore wings with a deep black spot near the costa at half the length. Length of the body 7 lines; of the wings 24 lines.

a. Ceylon. Presented by R. Templeton, Esq.

10. Euproctis bigutta.

Mas. *Candida; alæ anticæ gutta discali atra.*

Male. Pure white. Fore wings with a deep black dot on the discal areolet. Length of the body 5½ lines; of the wings 14 lines.

a. Canara, Malabar Coast. Presented by S. N. Ward, Esq.

11. Euproctis lunata.

Lutea (mas) *aut testacea* (fœm.); *alæ anticæ macula lunari discali nigra; fœm. abdomen apud medium luteum; pedes albi.*

Male and female. Fore wings with an arcuate discal spot. *Male.*—Luteous. *Female.*—Testaceous. Abdomen luteous in the middle. Legs white. Length of the body 6 lines; of the wings 14—16 lines.

a. North India. From Mr. Stevens' collection.

12. Euproctis atomaria.

Mas. *Lutea, subtus testacea; antennæ testaceæ, ramis fuscescentibus; abdomen et alæ posticæ testaceæ; alæ anticæ e punctis fuscis bifasciatæ.*

Var. β. *Alæ anticæ rufescentes, apicibus maculisque tribus luteis.*

Male. Luteous, testaceous beneath. Antennæ testaceous, with brownish branches. Abdomen and hind wings testaceous. Fore wings mostly speckled with brown, and with a brown dot on the discal areolet; the speckled part forming two broad bands, which are confluent by the interior border; the latter is beset with several long bristles. Length of the body 5—6 lines; of the wings 14 lines.

a. Java. From the East India Company's collection.

Var. β. Pale luteous, whitish testaceous beneath. Fore wings reddish for three-fourths of the length from the base, with a pale luteous spot by the base, another on the interior border, and a third and larger one beyond by the costa; the latter spot extends over the discal areolet.

b, c. North India. From Mr. Stevens' collection.

13. Euproctis lutescens.

Mas. *Pallide lutea; alæ anticæ gutta discali nigra, cillis nonnullis apud marginem interiorem longissimis.*

Male. Pale luteous. Fore wings with a black dot, various as to size, in the discal areolet. Hind wings paler. Length of the body 6—7 lines; of the wings 16—20 lines.

a—c. North India. From Mr. James' collection.
d. ———?

14. EUPROCTIS XANTHORRHÆA.

Alba; antennæ pennis fuscis, æneo-flavo penicillatis; alæ subtus posticæque limbo fusco adspersæ.

Liparis xanthorrhæa, *Kollar, Kaschmir, von Von Hugel*, 470, 3.

Himalaya Mountains, Kaschmir.

15. EUPROCTIS VITELLINA.

Pallide flava; alæ anticæ fascia abbreviata margine postico versus medium alæ protracta punctoque subapicali nigris.

Liparis vitellina, *Kollar, Kaschmir, von Von Hugel*, 471, 4.

Himalaya Mountains.

16. EUPROCTIS CHRYSOLOPHA.

Nigra; thorax aureo barbatus; abdomen albo annulatum, fœminæ *aureo barbatum; alæ niveæ, anticæ margine externo nigro venosæ.*

Liparis chrysolopha, *Kollar, Kaschmir, von Von Hugel*, 470, 2.

Himalaya Mountains.

Australia.

A. Alæ apice nigræ. - - - - - - leucomelas, *Walk.*
B. Alæ apice albæ.
A. Alæ subtus ex parte nigricantes. - - obsoleta, *Fabr.*
B. Alæ totæ albæ. - - - - - - tibialis, *Fabr.*
C. Alæ flavæ. - - - - - - - lutea, *Fabr.*
D. Alæ ferrugineæ. - - - - - Alphæa, *Fabr.*

17. EUPROCTIS LEUCOMELAS.

Mas. *Alba; palpi et pedes antici intus lutei; antennæ nigræ; alæ anticæ costa et triente apicali nigricantibus, posticæ apices versus fusco-cinereæ.*

Male. White. Palpi and fore legs on the inner side luteous. Antennæ black. Fore wings blackish on the costa, and for full one-third of the length from the tips. Hind wings brownish gray

towards the tips. Length of the body 5 lines; of the wings 16 lines.

a—c. Van Dieman's Land. Presented by Morton Allport, Esq.
d, e. New Holland. Presented by Major-Gen. Hardwicke.

18. EUPROCTIS OBSOLETA.

Mas et fœm. *Alba; palpi testacei, supra nigricantes; antennæ ramis nigris; pedes antici intus lutei.* Mas.—*Alæ anticæ apice subcinereæ, macula postica nigra, subtus ad costam et apices versus nigricantes.* Fœm.—*Abdomen apice fusco dense lanuginosum.*

Var. β. Fœm. *Abdomen apud luteum.*

Var. γ. Fœm. *Testaceo-alba; palpi supra fusci; abdomen apicem versus luteo dense pilosum, apice fusco hirtum.*

Bombyx obsoleta, *Fabr. Ent. Syst.* iii. 1, 463. *Donov. Epit. Ins. New Holl.* pl.

Liparis obsoleta, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 218, 3.

Male and female. White. Antennæ with black branches. Fore legs more or less luteous on the inner side. Legs occasionally streaked with black. *Male.*—Fore wings with an indistinct grayish tint at the tips and with a black spot by the interior angle; under side blackish on the costa and about the tips. *Fem.*—Abdomen clothed with luteous hairs on each side towards the tip, which is thickly clothed beneath with brown lanuginose hairs. Length of the body 4—7 lines; of the wings 11—18 lines.

Var. β. Fem. Abdomen luteous at the tip.

Fem. White, with a very slight testaceous tinge, which hardly appears on the hind wings. Palpi brown above. Antennæ black, white above. Abdomen thickly clothed towards the tip with luteous hairs, the tip with brown hairs.

a—g. Van Dieman's Land. Presented by R. Butler, Esq.
h. Van Dieman's Land. Presented by the Rev. Augustus Beaufort.
i, j. Van Dieman's Land. Presented by J. G. Children, Esq.
k, l. Van Dieman's Land. Presented by E. Doubleday, Esq.
m, n. Van Dieman's Land. Presented by Morton Allport, Esq.
o—q. Van Dieman's Land. From Mr. A. J. Smith's collection.
r. Sydney. Presented by Dr. Sinclair.
s—x. New Holland. Presented by Major-Gen. Hardwicke.
y. New Holland. Presented by Capt. Grey.
z. New Holland. Presented by the Entomological Club.

19. EUPROCTIS? TIBIALIS.

Thorax et alæ nivea; tibiæ anticæ flavescentes, nigro punctatæ.

Bombyx tibialis, *Fabr. Ent. Syst.* iii. 1, 661. *Donov. Epit. Ins. New Holl.* pl.

Liparis tibialis, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 217, 2.

New Holland.

20. EUPROCTIS? LUTEA.

Alæ flavissimæ, maculis obscurioribus.

Bombyx lutea, *Fabr. Ent. Syst.* iii. 1, 446. *Donov. Epit. Ins. New Holl.* pl.

Liparis lutea, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 219, 5.

New Holland.

21. EUPROCTIS? ALPHÆA.

Alæ ferrugineæ; anticæ puncto medio albo striyaque punctata fusca.

Bombyx Alphæa, *Fabr. Eut. Syst.* iii. 1, 445. *Donov. Epit. Ins. New Holl.* pl.

Liparis Alphæa, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 218, 4.

New Holland.

Country unknown.

22. EUPROCTIS? SPECTRA.

Mas. *Alba; corpus fulvescens; alæ anticæ ad costam subtestaceæ.*

Liparis Spectra, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Hypogymnæ A. Subsquammatæ* i. f. 1—4.

23. EUPROCTIS? VARIA.

Mas. *Lutea; subtus testacea; abdomen apice album; alæ anticæ macula fasciaque cervinis nigro adspersis, maculaque discali nigra; posticæ testaceæ.*

Male. Luteous, testaceous beneath. Abdomen white at the tip. Fore wings with a fawn-coloured black-flecked spot near the base, and a fawn-coloured black-flecked band, which widens irregularly from near the tip to the middle of the interior border, where the hairs are longer than elsewhere; a discal spot of black flecks. Hind wings testaceous. Length of the body 6 lines; of the wings 18 lines.

In the collection of Mr. Saunders.

Genus 41. STILPNOTIA.

Mas et fœm. Corpus sat validum. Palpi graciles, pilosi, caput paullo superantes; articulus 2us 1o multo longior; 3us parvus, conicus, acutus. Pedes sat robusti, vix pilosi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ latæ. *Mas.*—Antennæ longiores, late pectinatæ. Abdomen alas posticas non superans. *Fœm.*—Antennæ breviores, subpectinatæ. Abdomen alas posticas paullo superans.

Stilpnotia, *Westw. and Humph. Brit. Moths.* i. 90. *Steph. Cat. Lep. Brit.*
Arctornis, p., *Germ. Prodr.* 18.
Leucoma, *Steph. Ill. Brit. Ent. Haust.* ii. 63.
Phalæna-Bombyx, p., *Linn.; Berk.; Don.; Stew.; Turt.*
Phalæna, p., *Deg.; Wilkes.*
Bombyx, p., *Fabr.; Hübn.; Haw.*
Laria, p., *Schr.; Hübn.; Meig.*
Leucoma, p., *Hübn.*
Liparis, p., *Ochs.*
Arctia, p., *Curt.*

Body moderately stout. Proboscis very short. Palpi slender, pilose, not long, extending a little beyond the head; second joint much longer than the first; third conical, acute, small. Legs moderately stout, hardly pilose; hind tibiæ with two minute apical spurs. Wings broad. Fore wings almost straight along the costa, rounded at the tips; second inferior vein twice further from the third than from the first; third rather less than twice further from the fourth than from the second. *Male.*—Antennæ deeply pectinated, about half the length of the body. Abdomen more slender, not extending beyond the hind wings. *Female.*—Antennæ slightly pectinated, much less than half the length of the body. Abdomen extending a little beyond the hind wings.

1. Stilpnotia Salicis.

Alæ albo nitidæ; antennæ albo pectinatæ; pedes atro annulati.

Leucoma Salicis, *Steph. Ill. Brit. Ent. Haust.* ii. 64, 2.
Phalæna-Bombyx Salicis, *Linn. Syst. Nat.* ii. 282; *Faun. Suec.* 1129. *Gmel. ed. Syst. Nat.* i. 5, 2423, 46. *Berk. Syn.* i. 136. *Don. Nat. Hist. Brit. Ins.* i. 65, pl. 30. *Stew. El. Nat. Hist.* ii. 151. *Turt. Syst. Nat.* iii. 215.
Phalæna apparens, *Deg. Gen.* 37, 46.

Phalæna Salicis, *Wilkes*, 21, pl. 41.

——— ———, *List. Göed.* (Angl.) 84, f. 87 (Lat.), 302, f. 87. *Albin, Nat. Hist. Engl. Ins.* pl. 84, f. a—d. *Harr. Aur.* pl. 5. *Roes. Ins.* i. pl. 9.

Bombyx Salicis, *Fabr. Ent. Syst.* iii. 1, 459, 163. *Oliv. Enc. Méth.* v. 80, 193. *Wien. Verz.* 52, D. 2. *Borkh. Schmett.* iii. 292, 110. *Esp. Schmett.* iii. pl. 41. *Hübn. Bomb.* pl. 18, f. 70. *Larv. Lep.* iii. *Bomb.* ii. *Veræ* C, b, f. 1. *God. Pap. de France*, iv. pl. 27, f. 2.

Bombyx Salicinus, *Haw. Lep. Brit.* 187.

Laria Salicis, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Albæ*) 159, 1655. *Meig. Handb.* 122, 48; *Syst. Beschr. Eur. Schmett.* iii. 43, pl. 81, f. 3.

Arctia Salicis, *Curt. Brit. Ent.* ii. 68.

Liparis Salicis, *Ochs. Schmett.* iii. 198, 6; iv. 55, 6. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text.* 135, 15, 1. *Speyer, Ent. Zeit. Stett.* xiii. 318, 8. *Otto Bremer und W. Grey, Beit. Schmett. Noerd. China*, 72.

Stilpnotia Salicis, *Westw. and Humph. Brit. Moths*, i. 90, pl. 18, f. 2—4.

Europe and North China.

a—h. England. From Mr. Stephens' collection.
i. England. From Mr. Foxcroft's collection.
j—l. England.
m, n. Europe. From M. Becker's collection.

South America.

2. Stilpnotia tarsalis.

Mas. *Candida; palpi apice nigri; antennæ ramis testaceis; pedes nigro-cincti; alæ subtus guttis marginalibus nigris.*

Male.—Pure white. Palpi with black tips. Antennæ with testaceous branches. Legs with black bands; fore tibiæ slightly testaceous. Wings beneath with a few black dots along the fore part of the exterior border. Fore wings blackish beneath at the tips. Length of the body 7 lines; of the wings 16 lines.

a. Parà. From Mr. Bates' collection.

3. Stilpnotia tibialis.

Mas. *Candida; palpi extus nigri; antennæ ramis testaceis; tibiæ extus nigro unimaculatæ; tarsi extus nigricantes; alæ anticæ guttis duabus discalibus nigricantibus.*

Male. Pure white. Palpi black on the outer side. Antennæ with testaceous branches. Tibiæ with a single black dot on the outer side; tarsi mostly black on the outer side. Fore wings with two blackish dots, one on the discal areolet, the other between the first and second inferior veins. Length of the body 7 lines; of the wings 18 lines.

a. Honduras. From Mr. Dyson's collection.

Africa.

4. STILPNOTIA LUTEIPES.

Mas. *Alba; caput antice, palpi pedesque lutea; antennæ ramis fulvis; alæ argenteo-albæ, anticæ ad costam subtus pallide luteæ.*

Male. White. Head in front, palpi and legs bright luteous. Antennæ with tawny branches. Wings silvery white. Fore wings pale luteous on the costa beneath. Length of the body 6 lines; of the wings 17 lines

a. Sierra Leone. Presented by the Rev. D. F. Morgan.

Asia.

5. STILPNOTIA SUBTINCTA.

Albida; caput antice et subtus, pectus, abdomen apice et femora lutea; alæ apud margines subtestaceæ, anticæ ex parte cervino guttatæ.

Female. Whitish. Head in front and beneath, pectus, abdomen at the tip and femora luteous. Antennæ with testaceous branches. Wings with a very slight testaceous tinge along the borders; veins testaceous beneath. Fore wings with fawn-coloured flecks on the basal half between the interior border and the middle. Length of the body 7 lines; of the wings 18 lines.

East Indies. In the collection of Mr. Saunders.

Genus 42. CARAMA.

Corpus sat robustum. Palpi brevissimi, pilosissimi. Thoracis latera fasciculis albis; abdomen alas posticas non superans, apice dense fasciculatum. Pedes graciles, longiusculi; tibiæ posticæ calcaribus minutis apicalibus. Alæ latiusculæ. *Mas.*—Antennæ sat late pectinatæ. *Fœm.*—Antennæ vix pectinatæ.

Arcturus, *Curt. Brit. Ent.* vii. 336.

Body moderately stout. Proboscis and palpi very short, the latter very pilose. Thorax on each side with a tuft of long vertical hairs. Abdomen thickly tufted at the tip, not extending beyond the abdomen. Legs slender, rather long; hind tibiæ with minute apical spurs. Wings rather broad. Fore wings with the second inferior vein about twice further from the third than from the first; third more than twice further from the fourth than from the second. *Male.* — Antennæ rather deeply pectinated. *Female.* — Antennæ hardly pectinated.

1. Carama Sparshalli.

Mas et fœm. *Argenteo-alba, nitens; caput antice subtusque necnon pedes antici supra nigricantia; vertex et abdominis discus citrini; antennæ luteæ.*

Var. β. *Antennæ testaceæ.*

Var. γ. *Caput subtus fuscum; palpi fusci; pedes antici fusco vittati.*

Arcturus Sparshalli, *Curt. Brit. Ent.* vii. 336.

Male and fem. Pure silvery white, shining. Head in front and beneath and fore legs above blackish. Vertex and disk of the abdomen lemon-colour. Antennæ luteous. Length of the body 3½—8 lines; of the wings 12—18 lines.

Var. β. Antennæ testaceous.

Var. γ. Head brown beneath. Palpi brown. Fore legs striped with brown.

a. Parà. From Mr. Bates' collection.
b, c. Santarem. From Mr. Bates' collection.
h—j. ———?

Genus 43. TRICHETRA.

Corpus sat robustum. Caput et thorax pilis longissimis vestita. Palpi pilosissimi. Pedes dense hirti; tibiæ posticæ calcaribus minutis apicalibus. Alæ sat angustæ. *Mas.*—Antennæ late pectinatæ, corporis dimidio paullo longiores. Abdomen alas posticas non superans, apice fasciculatum. *Fœm.*—Antennæ subpectinatæ, corporis dimidio non longiores. Abdomen alas posticas paullo superans, apice densissime lanuginosum.

Trichetra, p., *Westw. Intr. Class. Ins.* 92.

Body rather stout. Head and thorax clothed with very long hairs. Proboscis and palpi very short, the latter very hairy. Legs

thickly clothed with long hairs; hind tibiæ with minute apical spurs. Wings rather narrow. Fore wings slightly convex along the apical part of the costa; three inferior veins; first and second contiguous at the base; third remote. *Male.*—Antennæ deeply pectinated, rather more than half the length of the body. Abdomen not extending beyond the hind wings; its tip tufted with very long hairs. *Female.*—Antennæ very minutely pectinated, not more than half the length of the body. Abdomen extending a little beyond the hind wings, most thickly lanuginose at the tip.

A. Alæ albæ. - - - - - - - mesomelas, *Walk.*
B. Alæ nigræ. - - - - - - marginalis, *Walk.*

1. Trichetra mesomelas.

Mas et fœm. *Alba; corpus plus minusve nigrum.*

White. Antennæ testaceous. Fore legs black above. *Male.*—Head black, white in front. Abdomen blackish, white at the base and at the tip. *Female.*—Head and thorax black. Abdomen blackish above; tip with black wool. Length of the body 5—7 lines; of the wings 16—22 lines.

Var. β. *Fem.* Abdomen ochraceous at the tip.

Var. γ. *Fem.* Abdomen with black hairs towards the tip beneath.

Var. δ. Abdomen white, black towards the tip.

Var. ε like *var.* δ. Head and fore part of the thorax white.

Var. ζ. White. Thorax with brown hairs. Tip of the abdomen with testaceous hairs.

Var. η like *var.* ζ. Thorax with white hairs.

a—d. Van Dieman's Land. Presented by Morton Allport, Esq.
e. Swan River. Presented by Sir J. Richardson.
f, g. Sydney. Presented by E. Doubleday, Esq.
h. New South Wales. From Mr. Wood's collection.
i. New Holland. Presented by the late Earl of Derby.
j. Van Dieman's Land. Presented by Capt. Ross.
k. New Holland. Presented by W. W. Saunders, Esq.
l, m. New Holland.

2. Trichetra marginalis.

Mas et fœm. *Fusca aut cervina; caput, antennæ, pectus et pedes testacea; abdomen apice testaceum; alæ posticæ albo late marginatæ.*

Dark brown. Head, antennæ, pectus and legs testaceous. Abdomen testaceous at the tip. Hind wings with a broad white border. *Male.* — Fore wings with white flecks, and with a white streak along the exterior border. *Female.* — Fore wings with a broad white border. Length of the body 6—7 lines; of the wings 14—20 lines.

Var. β. Male. Head and thorax fawn-colour. Fore wings fawn-colour, with a darker discal spot, and a darker oblique whitish bordered band, between which and the exterior border the wings are very pale fawn-colour. Hind wings with a very broad white border.

Var. γ. Female. Fore wings with a pale brown exterior border.

a, b. Van Dieman's Land. Presented by — Walcott, Esq.
c, d. New Holland. Presented by H. G. Harrington, Esq.
e, f. New Holland. From Mr. Argent's collection.
g—i. New Holland. From Mr. Stevens' collection.
j. Sydney. Presented by E. Doubleday, Esq.

Genus 44. TEARA.

Caput sat validum, sublineare, fere cylindricum. Caput et thorax pilosissima. Proboscis brevis. Palpi breves; articulus 2us 1o longior; 3us minimus. Pedes pilosi sat validi; tibiæ posticæ calcaribus duobus longis apicalibus. Alæ latæ. *Mas.*—Antennæ latissime pectinatæ. *Fœm.*—Antennæ mediocriter pectinatæ.

Bombyx, p., *Lewin; Donov.; Boisd.*
Trichetra, p., *White.*

Body rather stout, nearly linear and cylindrical. Head and thorax very hairy. Proboscis short. Palpi short; second joint longer than the first; third very minute. Abdomen hardly extending as far as the hind wings. Legs hairy, rather short; hind tibiæ with two long apical spurs. Wings broad. Fore wings straight in front, hardly angular at the tips, oblique and very slightly along the exterior border; interior angle much rounded; three inferior veins; second much nearer to the first than to the third. *Male.*—Antennæ very deeply pectinated. *Female.*—Antennæ moderately pectinated.

A. Alæ anticæ plus minusve argenteæ.
A. Alæ non fasciatæ aut unifasciatæ.
a. Alæ posticæ nigræ.
a. Thorax testaceus aut fulvus. - - tristis, *Lewin.*

b. Thorax niger, antice albidus. - melanosticta, *Donov.*
B. Alæ posticæ flavæ. - - - - signata, *Walk.*
B. Alæ quadrifasciatæ. - - - - Isabella, *White.*
B. Alæ anticæ non argenteæ.
A. Abdomen obscurum.
A. Alæ rufo non maculatæ.
a. Alæ fulvæ aut fuscæ.
i. Alæ non vittatæ. - - - contraria, *Walk.*
ii. Alæ anticæ albo vittatæ. - - interrupta, *Walk.*
b. Alæ albidæ, nigro variæ. - - rotundata, *Walk.*
c. Alæ fuscæ, apice albæ. - - - fasciata, *Walk.*
B. Alæ anticæ rufo maculatæ. - - variegata, *Walk.*
B. Abdomen album. - - - - - notabilis, *Walk.*

1. Teara tristis.

Alæ anticæ fuscæ albido pulverulentæ, macula subcostali fusconigra subocellari; posticæ nigræ; quatuor serie marginali punctorum albidorum; fimbria nigra flavescente intersecta.

Bombyx tristis, *Lewin, Prodr. Ent.* 9, pl. 8. *Donov. Epit. Ins. New Holl.* pl.
Liparis tristis, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 223, 6.
Trichetra tristis, *White, Append. Capt. Gray's Journ. Exped. Discov. Austral.* 479, f. 2.

New Holland.

Male. Var. a. Head and thorax white, with a slight luteous tinge. Abdomen black; tip and dorsal spots luteous. Fore wings silvery white, luteous along the costa, with luteous ocelli along the exterior border, with a luteous brown-bordered discal spot, and with a slight oblique luteous band beyond the latter. Hind wings dark brown; marginal dots and ciliæ lutepus.

Var. β like *var. a.* Fore wings with brown borders, and with a broad fawn-coloured stripe along the inner border; exterior border with luteous dots.

Var. γ like *var. β.* Band of the fore wings brown.

Var. δ. Fore wings brown; disk partly whitish; discal spot blackish, with a luteous centre; a row of whitish dots along the exterior border, where the cilia has luteous dots.

Var. ε. Head and thorax luteous. Fore wings dark brown, partly luteous in the disk, and with a double row of luteous dots along the interior border.

a—g. New Holland. Presented by the Entomological Club.
h, i. New Holland. Presented by Major-Gen. Hardwicke.
j—n. New Holland. Presented by the late Earl of Derby.
o, p. New Holland. Presented by — Walcott, Esq.
q—s. New Holland. From Mr. Milne's collection.
t, v. New Holland. Presented by J. G. Children, Esq.
w. New Holland.

2. Teara melanosticta.

Nigra; caput et thorax anticus alba; abdomen apice maculisque dorsalibus luteis; alæ anticæ argenteæ fusco-luteoque plus minusve marginatæ, fascia obliqua fusca maculaque discali nigricante; posticæ fuscæ guttis marginalibus luteis et nonnunquam fasciis duabus testaceis.

Bombyx melanosticta, *Donov. Epit. Ins. New Holl.* pl.
Liparis melanosticta, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 225, 7.
New Holland.

Male. Var. a. Black. Thorax in front and head white. Tip and dorsal spot of the abdomen luteous. Fore wings silvery white, brown along the interior border, dark brown mingled with luteous along the costa, and with a blackish discal spot, adjoining which there is an exterior oblique dark brown band; exterior border partly brown, with luteous dots. Hind wings dark brown, with luteous dots along the cilia, and with two indistinct testaceous bands in the disk.

Var. β. Fore wings brown along the exterior border.
Var. γ. Hind wings without bands. *Female.*—Like the male, but with the band of the fore wings indistinct or quite obsolete; discal spot varying much in size.

a, b. Van Dieman's Land. Presented by Morton Allport, Esq.
c—e. Van Dieman's Land. Presented by R. Butler, Esq.
f, g. Sydney. Presented by E. Doubleday, Esq.
h. New Holland. From Mr. Milne's collection.
i. New Holland. From Mr. Hunter's collection.
j. New Holland.

3. Teara signata.

Mas. *Testacea; abdomen luteum; alæ anticæ albæ, costa margineque exteriore fuscis luteo variis, fascia obliqua maculaque discali fuscis; posticæ luteæ, fascia submarginali fusca.*

Bombyx tristis, p., *Donov. Epit. Ins. New Holl.* pl.

Male. Head and thorax pale testaceous. Abdomen luteous. Fore wings white, brown mingled with luteous along the costa and along the exterior border, with a slight oblique brown band beyond the discal spot, which is transverse and dark brown. Hind wings pale luteous, with a brown submarginal band. Length of the body 6 lines; of the wings 16 lines.

a. Swan River. Presented by Sir J. Richardson.

4. Teara Isabella.

Alæ anticæ albæ, fasciis tribus apiceque nigris, maculis subocellatis duabus inter fasciam 2am 3amque, maculis octo apicalibus; posticæ nigræ, basi anguste, apiceque marginali ochraceis. Fœm.—*Alæ anticæ albæ fasciis tribus fusco-nigris apice obscurioribus, maculis 8 submarginalibus antice albis postice ochraceis.*

Trichetra Isabella, *White, Append. Capt. Grey's Journ. Exped. Discov. Austral.* 479, f. 10, 1, 3; f. 11.

Male. Luteous. Abdomen blackish, luteous at the base and at the tip. Fore wings partly white, with two luteous discal dots, and with four brown oblique bands; the fourth submarginal and denticulate. Hind wings dark brown; base and cilia luteous. *Female.*—Whitish testaceous. Abdomen pale luteous, with a broad brown band. Fore wings white, slightly tinged with testaceous, with four brown bands. Hind wings pale luteous, with two brown bands.

Var. β. First and second bands of the fore wings obsolete.

a—d. King George's Sound. Presented by Capt. Grey.

5. Teara contraria.

Fusca; caput et thorax albido varia; antennæ testaceæ; abdomen ochraceo-fulvum, fasciis nigro-fuscis, subtus nigro-fuscum, apice album; alæ anticæ supra posticæque subtus macula discali alba.

Brown. Head and thorax with whitish tipped hairs. Antennæ testaceous. Abdomen orange-tawny, with blackish brown bands; under side blackish brown; tip white. Fore wings with a discal white spot above. Hind wings with a discal white spot beneath. Length of the body 8—10 lines; of the wings 20—32 lines.

Var. β. Discal white spot of the fore wings indistinct.

Var. γ. Head, thorax and wings tawny. Under side of the abdomen tawny, with a row of black spots along each side.

a—c. Sydney. Presented by E. Doubleday, Esq.
d, e. New Holland. From Mr. Hunter's collection.
f—j. Swan River. Presented by Sir J. Richardson.
k. New Holland. From Mr. Milne's collection.
l. New Holland. Presented by the Entomological Club.
m, n. New Holland.

6. Teara interrupta.

Mas. *Fulva; antennæ testaceæ; thorax et pectus ex parte albido pilosa; abdomen fusco fasciatum, disco subtus apiceque albidis; alæ anticæ fuscæ vittis quatuor interruptis albis; posticæ fusco-fulvæ.*

Male. Tawny. Antennæ testaceous. Thorax and pectus partly clothed with whitish hairs. Fore borders of the abdominal segments brown; disk of the under side and tip whitish. Fore wings brown, with four white stripes, which are interrupted by two dark brown bands, and with a row of white dots along the exterior border; first brown band slightly curved, at one-fourth of the length of the wing; second undulating, before three-fourths of the length; a dark brown discal spot. Hind wings brownish tawny, paler beneath, as are also the fore wings. Length of the body 10 lines; of the wings 22 lines.

a. Adelaide. Presented by the Entomological Club.

Var. β. *Male.* Fore wings with a white stripe in the disk. *Female.*—Fore wings with three white stripes, and with a slender curved dark brown band beyond the middle.

b. Swan River. Presented by Sir J. Richardson.
c. New South Wales. From Mr. Milne's collection.
d New Holland. Presented by Capt. Grey.

7. Teara rotundata.

Mas. *Albida; capitis latera antica nigra; palpi nigri; antennæ ramis fulvis; abdomen supra fulvum; femora tibiæque antica intus nigra, tarsi antici nigro fasciati; alæ anticæ fasciis duabus duplicatis angulosis subinterruptis nigris; posticæ cinereæ, apud discum albidæ, albo ciliatæ.*

Male. Whitish. Head black on each side in front. Palpi black. Antennæ with tawny branches. Abdomen tawny above. Fore femora and fore tibiæ black on the inner side; fore tarsi with black bands. Fore wings with some black marks at the base, and with two irregular angular double almost interrupted black bands, one at one-third of the length, the other at a little beyond two-thirds; under side with a black discal dot. Hind wings gray, whitish in the disk, and with a white fringe. Length of the body 8 lines; of the wings 20 lines.

a. Van Dieman's Land. Presented by — Walcott, Esq.

8. Teara fasciata.

Fœm. *Alba; caput supra fuscescens; palpi fusci, basi testacei; antennæ testaceæ; thorax fasciis duabus angustis fuscis; pectus testaceum; abdomen fascia latissima nigra; pedes fusci, tarsis flavis fusco fasciatis; alæ anticæ fuscæ, apices versus albæ; posticæ fuscæ, albo ciliatæ.*

Female.—White. Head brownish above. Palpi brown, testaceous towards the base. Antennæ testaceous. Thorax with two slender brown bands, partly clothed with testaceous hairs. Pectus testaceous. Abdomen with a very broad band, which is deep black above, brown beneath. Legs mostly brown; tarsi yellow, with brown bands. Fore wings brown, white above for more than one-third of the length from the tips, and for about one-third of the breadth from the interior border; fringe with brown spots. Hind wings brown, with a white fringe. Length of the body 6 lines; of the wings 18 lines.

New South Wales. In Mr. Saunders' collection.

9. Teara variegata.

Alba; palpi nigri, apice albi; antennæ testaceæ; thorax fuscus, rufo alboque varius, antice albus: abdomen supra luteum fasciis interruptis nigris; alæ anticæ maculis nonnullis discalibus rufis; posticæ pallide fuscæ fasciis media arcuata obscuriore.
Mas.—*Alæ anticæ fasciis nonnullis macularibus fuscis.*
Fœm.—*Alæ anticæ fuscæ maculis variis albis.*

White. Head with some brown hairs on the vertex. Palpi black, with white tips. Antennæ testaceous. Thorax dark brown, with many red and white hairs, mostly white in front. Abdomen luteous above, with more or less broad interrupted black bands. Fore wings with some red discal spots. Hind wings pale brown, with a darker curved middle band beneath. *Male.*—Abdomen reddish at the tip. Fore wings with some irregular, imperfect and partly confluent macular brown bands; under side whitish. *Female.*—Fore wings brown, with many white spots of various size and shape, and with some blackish marks; under side like the hind wings, brown, with white brown-spotted borders. Length of the body 12—14 lines; of the wings 24—32 lines.

a, *b*. Sydney. From Mr. Lambert's collection.
c. New South Wales. From Mr. Wood's collection.
d, *e*. New South Wales. From Mr. Milne's collection.
f. New South Wales.

10. Teara notabilis.

Mas et fœm. *Cinerea; palpi pedesque ex parte nigricantes; abdomen album; alæ anticæ cano variæ, macula discali fasciisque duabus albis nigro marginatis, fasciaque exteriore undulosa submaculari obscure cinerascente; posticæ albæ.*

Male and fem. Gray. Palpi and legs partly blackish. Abdomen whitish. Fore wings slightly varied with hoary, and with a white black-bordered discal spot, which is between two blackish bands; inner band nearly straight and upright, with a whitish border on the inner side; outer band oblique, undulating, with a whitish border on the outer side, between which and the exterior border there is a very oblique slightly undulating almost macular dark gray band. Hind wings white. Length of the body 9½ lines; of the wings 22 lines.

a, *b*. Swan River. From Dr. Bacon's collection.
c. Van Dieman's Land. Presented by Morton Allport, Esq.

Genus 45. BERALADE.

Corpus sat gracile. Proboscis nulla aut brevissima. Palpi porrecti, longiusculi, caput superantes; articulus 2us 1o triplo longior; 3us lanceolatus, 1o paullo brevior. Abdomen alas posticas paullo superans. Pedes pilosi, sat graciles; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat angustæ. *Mas.*—Antennæ late pectinatæ. *Fœm.*—Antennæ breviter pectinatæ.

Body rather slender. Proboscis obsolete or very short. Palpi porrect, rather long, extending some distance beyond the head; second joint about three times the length of the first; third lanceolate, a little shorter than the first. Abdomen extending a little beyond the hind wings. Legs pilose, rather slender; hind tibiæ with four rather long spurs. Wings rather narrow. Fore wings almost straight along the costa, rounded at the tips, oblique along the exterior border; first and second inferior veins nearly contiguous at the base; second remote from the third; third a little nearer to the fourth than to the second.

1. BERALADE PEROBLIQUA.

Albida; palpi lutei; antennæ ramis fulvis; thorax antice et abdominis discus pallide lutei; pedes antici intus lutei. Mas.—*Caput apud oculos nigrum; pedes antici nigro fasciati; alæ anticæ e guttis fuscis bifasciatæ.* Fœm.—*Alæ anticæ fasciis quatuor guttularibus fuscis.*

Whitish. Palpi luteous. Antennæ with tawny branches. Thorax with a slight luteous tinge in front. Disk of the abdomen pale lutepus. Fore legs luteous on the inner side. *Male.*—Head black about the eyes. Fore legs with black bands. Fore wings with two very oblique bands of elongated brown dots, which commence near the tips, and slightly diverge towards the interior border. *Female.*—Fore wings with four oblique bands of brown dots. Length of the body 6 lines; of the wings 14—15 lines.

a, b. Caffraria. From M. Becker's collection.

Genus 46. NIGASA.

This genus seems to be a connecting link between *Darala* and the *Geometrites*, but to be most allied to the latter; it is therefore removed from this family.

Genus 47. ANTHELA.

Mas. Corpus robustum, valde pilosum. Palpi pilosi, porrecti, caput vix superantes; articulus 3us minimus. Antennæ subpectinatæ. Pedes nudi, sat graciles; tibiæ posticæ calcaribus duobus longis apicalibus. Alæ latiusculæ, posticæ abdomen superantes.

Male. Body stout, very hairy. Palpi hairy, porrect, hardly extending beyond the head; third joint very small. Antennæ minutely pectinated. Abdomen not extending so far as the hind

wings. Legs bare, rather slender; hind tibiæ with two long apical spurs. Wings rather broad. Fore wings with the second inferior vein rather remote from the first, but nearer to it than to the third; third nearer to the second than to the fourth.

1. ANTHELA FERRUGINOSA.

Mas. *Ferruginea; antennæ testaceæ; alæ anticæ maculis paucis discalibus guttisque submarginalibus nigricantibus.*

Male. Pale ferruginous. Head and fore part of the thorax and of the pectus darker. Antennæ testaceous. Wings with a small blackish discal spot, which is most apparent beneath, and with a row of submarginal blackish dots. Length of the body 5—6 lines; of the wings 14—16 lines.

Var. β. Spots on the wings more distinct; two or three additional spots on each disk.

a. Sydney. From Mr. Lambert's collection.
b. New Holland. Presented by Major-Gen. Hardwicke.

Genus 48. SITINA.

Corpus crassum. Palpi breves, robusti, pilosi; articulus 2us 1o longior; 3us minimus. Pedes validi, pilosi; tibiæ posticæ calcaribus apicalibus parvis. *Mas.*—Antennæ mediocriter pectinatæ. Abdomen alas posticas paullo superans. Alæ breviusculæ. *Fœm.*—Antennæ subpectinatæ. Abdomen alas posticas non superans. Alæ mediocriter longæ.

Bombyx p., *Donov.*
Liparis, p., *Boisd.*

Body stout. Palpi short, stout, hairy; second joint longer than the first; third joint very small. Antennæ pectinated. Legs stout, hairy; hind tibiæ with short apical spurs. Fore wings with the first and second inferior veins almost contiguous at the base; third rather further from the second than from the fourth. *Male.*—Antennæ moderately pectinated. Abdomen extending a little beyond the hind wings. Wings rather short. *Female.*—Antennæ slightly pectinated. Abdomen not extending beyond the hind wings. Wings moderately long.

1. SITINA VITULINA.

Alæ anticæ canæ fusco nebulosæ et fasciatæ, annulo medio cano subreniformi nigro-cincto; posticæ fuscæ fascia pallida; quatuor punctis marginalibus albidis.

Bombyx vitulina, *Donov. Epit. Ins. New Holl.* pl.
Liparis vitulina, *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 217, 1.

White. Head slightly testaceous on each side. Palpi testaceous, brown towards the tips. Antennæ brown, with ferruginous branches. Thorax with an oblique brown streak on each side, and with an hindward broad brown stripe; hind part brown. Abdomen brown, white at the tip, partly white on each side. Legs brown; tarsi with testaceous bands; anterior tibiæ with a testaceous band; tibiæ thickly clothed with white hairs. Fore wings partly shaded with brown, with a brown spot at the base, a brown ocellus in the disk, and with three brown bands; the two outermost zigzag. Hind wings brown, with a whitish oblique discal band. Cilia of the four wings alternately brown and white. Length of the body 8—11 lines; of the wings 18—26 lines.

a, *b*. Sydney. Presented by E. Doubleday, Esq.
c. New Holland. From Mr. Lambert's collection.
d, *e*. New Holland. From Mr. Milne's collection.
f, *g*. New Holland.

Genus 49. SINAGA.

Mas. Corpus robustum, pilosum. Proboscis obsoleta? Palpi porrecti, dense pilosi, caput paullo superantes; articulus 1us brevis; 3us parvus, conicus. Antennæ subpectinatæ, thorace non longiores. Abdomen alas non superans. Pedes validi; tibiæ posticæ calcaribus apicalibus exiguis. Alæ sat latæ; anticæ apud costam marginemque exteriorem subrectæ, apice subangulatæ.

Male. Body stout, pilose. Proboscis obsolete? Palpi densely pilose, porrect, extending somewhat beyond the head; first joint short; third small, conical. Antennæ slightly pectinated, not longer than the thorax. Abdomen not extending beyond the thorax. Legs stout; hind tibiæ with minute apical spurs. Wings moderately broad. Fore wings nearly straight in front, slightly angular at the tips, oblique and nearly straight along the exterior border; interior angle rounded; second inferior vein much further from the third than from the first; third much further from the fourth than from the second.

1. SINAGA SUBFASCIATA.

Mas. *Cervina; caput supra et thorax antice alba; palpi subtus et apice albi; antennæ nigræ; pedes nigri, albo hirti, tarsis nigro-cinctis; alæ anticæ fasciis tribus obliquis albis; posticæ fascia albidæ.*

Male. Fawn-colour. Head above and fore part of the thorax white. Palpi white beneath and towards the tips. Antennæ black. Legs black, clothed with white hairs; femora partly clothed with fawn-coloured hairs; tarsi with white bands. Fore wings with three oblique somewhat irregular white bands; first band near the base; second passing just beyond the discal spot, which is white and partly bordered with brown; third nearly parallel to the exterior border, including a row of brown spots. Hind wings paler than the fore wings, with a whitish indistinct band at one-third of the length; fringe white. Length of the body 6 lines; of the wings 19 lines.

a. New Holland. From Mr. Argent's collection.

Genus 50. ANAPHE.

Mas. Corpus gracile. Proboscis brevissima. Palpi breves, pilosi; articulus 2us 1o longior; 3us minimus. Antennæ mediocriter pectinatæ. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus apicalibus. Alæ latæ.

Male. Body cylindrical, moderately stout. Proboscis very short. Palpi short, hairy; second joint longer than the first; third very minute. Antennæ moderately pectinated. Abdomen extending a little beyond the hind wings. Legs stout; hind tibiæ with apical spurs. Wings broad. Fore wings with three inferior veins; first and second near together at the base; third remote.

1. ANAPHE RETICULATA.

Mas et fœm. *Lutea; antennæ nigræ; thorax ferrugineus, fascia antica alba; abdomen subtus pallide testaceum, segmentorum marginibus posticis fuscescentibus; tibiæ tarsique antica supra nigricantia; alæ anticæ albæ fasciis duabus vittisque duabus marginibusque ferrugineis, subtus albido-testaceæ fascia obliqua ferruginea; posticæ albidæ, subtus albido-testaceæ, fascia ferruginea.*

Male and fem. Luteous. Antennæ black. Thorax mostly ferruginous, with a white band in front. Abdomen paler than the head, pale testaceous beneath; hind borders of the segments brownish. Fore tibiæ and fore tarsi blackish above. Fore wings white, with two ferruginous bands, which are intersected by two ferruginous stripes; the bands converge towards the hind borders, and the stripes towards the base of the wing, the anterior stripe terminating in the inner band; borders ferruginous; under side whitish testaceous, with an oblique dull ferruginous band at three-fourths of

the length. Hind wings whitish; under side whitish testaceous, with a ferruginous band, which is not in a line with that of the fore wings. *Male.*—Length of the body 7 lines; of the wings 18 lines. *Fem.*—Length of the body 7½ lines; of the wings 24 lines.

a—*c*. Port Natal. From M. Gueinzius' collection.

Genus 51. CISPIA.

Mas. Corpus gracile. Palpi porrecti, robusti, sat longi; articulus 2us 1o valde longior, 3us conicus, minimus. Antennæ late pectinatæ, corporis dimidio vix breviores. Abdomen alas posticas non superans. Tibiæ posticæ calcaribus quatuor sat longis. Alæ latæ.

Male. Body slender. Palpi moderately long, stout, porrect, hardly ascending, clothed with short hairs; second joint very much longer than the first; third conical, very minute. Antennæ deeply pectinated, nearly half the length of the body. Abdomen extending nearly as far as the hind wings. Hind tibiæ with four moderately long spurs. Wings broad. Fore wings with the third inferior vein twice further from the second than the second is from the first; fourth twice further from the third than the third is from the second.

1. Cispia punctifascia.

Mas. *Lutea; palpi et pedes pallidiores; antennæ nigræ; thorax e guttis nigris bifasciatus; pedes extus nigro signati; alæ anticæ supra luteo-cervinæ, guttis basi nigris fasciaque lutea, venis albidis, vittis exterioribus testaceis; posticæ subtus fascia arcuata interrupta pallide fusca.*

Male. Luteous. Palpi and legs mostly testaceous. Antennæ black, white on each side. Thorax with two bands of black dots. Legs with black marks on the outer side. Fore wings above luteous fawn-colour, with black dots at the base, and with a pale luteous partly brown-bordered band before the middle; veins whitish; a testaceous stripe in the disk of each areolet beyond the band. Hind wings with a curved slight pale brown interrupted band in the middle beneath. Length of the body 7½—8 lines; of the wings 20—22 lines.

a. Silhet. From Mr. Stainforth's collection.
b. Silhet. Presented by E. Doubleday, Esq.

2. Cispia plagiata.

Mas. *Lutea; alæ anticæ supra rufescentes, nigro conspersæ, plaga media lutea.*

Male. Luteous. Fore wings mostly pale reddish above, with numerous black flecks, and with a large luteous middle spot; several long lanceolate black hairs along the interior border, these hairs are luteous towards the base. Length of the body 9 lines; of the wings 22 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.

Genus 52. POLOMA.

Corpus sat gracile. Palpi porrecti, validi, pilosi, caput non superantes; articulus 1us brevissimus; 3us minimus. Antennæ thorace multo longiores. Pedes robusti; femora et tibiæ pilosa; tibiæ posticæ calcaribus quatuor longis. Alæ latæ. *Mas.*—Antennæ sat late pectinatæ. *Fœm.*—Antennæ mediocriter pectinatæ.

Body rather slender. Proboscis not visible. Palpi porrect, stout, pilose, not extending beyond the head; first joint very short; third very minute. Antennæ much longer than the thorax. Legs stout, femora and tibiæ pilose; hind tibiæ with four long spurs. Wings broad. Fore wings hardly convex in front, rounded at the tips, very slightly convex and oblique along the exterior border; interior angle much rounded; three inferior veins; second about thrice further from the third than from the first. *Male.*—Antennæ rather deeply pectinated. Abdomen extending nearly as far as the hind wings. *Female.*—Antennæ moderately pectinated. Abdomen extending as far as the hind wings.

1. Poloma angulata.

Mas. *Fusca, subtus rufo-ferruginea; antennæ albidæ ramis nigris; abdomen rufo-ferrugineum; alæ fasciis duabus mediis angustis angulosis fuscis, exteriore testaceo extus marginata; anticæ fusco nebulosæ, fascia basim versus subarcuata testacea, plaga maxima costali rufo-ferruginea gutta strigaque angulosa fuscis includente; posticæ rufo-ferrugineæ.*

Male. Brown, reddish ferruginous beneath. Antennæ whitish, with black branches. Abdomen reddish ferruginous. Wings with two zigzag slender middle brown bands, the outer one with a testaceous border on the outer side; these bands are more undulating

on the under side. Fore wings with several shades of brown, with a slightly curved testaceous band at one-fourth of the length, and with a very large reddish ferruginous patch along the middle part of the costa; this patch is deeply notched on its hind side, and contains a brown dot and a zigzag brown streak; under side and hind wings reddish ferruginous. Length of the body 7½—9 lines; of the wings 20—23 lines.

a—d. Port Natal. From M. Gueinzius' collection.
e. Port Natal. From M. Becker's collection.
f. Zoolu Country. Presented by G. F. Angas, Esq.
g. Cape. From M. Dregé's collection.

Genus 53. MORASA.

Mas. Corpus validum. Caput, thorax et pedes pilis longis vestita. Palpi porrecti, longe pilosi, caput sat longe superantes; articulus 2us 1o multo longior; 3us elongatus, lanceolatus, 2o brevior. Antennæ mediocriter pectinatæ, corporis dimidio breviores. Abdomen alas posticas paullo superans; oviductus conspicuus. Pedes robusti; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat latæ; anticæ ad costam subconvexæ.

Male. Body stout. Head, thorax and legs clothed with long hairs. Proboscis very short or obsolete. Palpi clothed with long hairs, porrect, extending some distance beyond the head; second joint much longer than the first; third elongated, lanceolated, shorter than the second. Antennæ moderately pectinated, less than half the length of the body. Abdomen extending a little beyond the hind wings. Oviduct exserted, short. Legs stout; hind tibiæ with four rather long spurs. Wings moderately broad. Fore wings very slightly convex in front, rounded at the tips, oblique along the exterior border; three interior veins; second about twice further from the second than from the first.

1. MORASA MODESTA.

Fœm. *Ferruginea; palpi rufescentes, apice fusci; antennæ nigræ, basi rufæ; abdomen fulvum, basi rufescens, subtus fuscum; pedes nigricantes; alæ anticæ basi albo guttatæ, necnon e guttis albidis bifasciatæ; posticæ albidæ, marginibus pallide fusce*scentibus.

Female. Ferruginous. Palpi reddish, with brown tips. Antennæ black, red towards the base. Abdomen tawny, reddish at the base, brown beneath. Legs blackish. Fore wings with white dots,

at the base, with an oblique white streak on the discal areolet; two very slender bands of whitish dots, one extending from the discal spot to the interior border, the other at three-fourths of the length of the wing and nearly parallel to the exterior border; under side pale reddish. Hind wings whitish, with pale brownish borders; a rosy tinge along the interior border. Length of the body 7 lines; of the wings 17 lines.

a. South Africa. From Mr. Pamplin's collection.

2. MORASA? FUSCA.

Fœm. *Ferruginea; abdomen vitta dorsali lata nigra; alæ anticæ fuscæ, macula costali interrupta testacea; posticæ roseæ, basi fulvæ.*

Antarctia fusca, *Hübn. Verz. Schmett.* 191, 1965.
Phalæna-Bombyx fusca, *Cram. Pap. Exot.* iv. 36, pl. 307.

Fem. Ferruginous. Abdomen with a broad black dorsal stripe, which is interrupted on the hind border of each segment. Fore wings brown, with a testaceous discal spot in three divisions. Hind wings rose-colour, tawny towards the base.

Surinam.

Genus 54. MESERA.

Mas. Corpus sat validum, valde pilosum. Palpi porrecti, caput vix superantes; articulus 2us 1o multo longior; 3us minutus, conicus. Antennæ latissime pectinatæ, corporis dimidio paullo longiores. Abdomen apice fasciculatum, alas posticas non superans. Pedes gracillimi; tibiæ posticæ calcaribus parvis apicalibus. Alæ mediocriter latæ. *Fœm.?*—Antennæ subpectinatæ. Abdomen apice lanuginosum.

Male. Body very pilose, rather stout. Proboscis obsolete. Palpi porrect, hardly extending beyond the head; second joint much longer than the first; third minute, conical. Antennæ very deeply pectinated, a little more than half the length of the body. Abdomen tufted at the tip, not extending so far as the hind wings. Legs very slender; hind tibiæ with small apical spurs. Wings moderately broad. Fore wings almost straight in front, rounded at the tips, oblique along the exterior border; interior angle rounded; three inferior veins; first and second united at the base; third remote. *Female?*—Antennæ minutely pectinated. Abdomen lanuginose at the tip. Fore wings with the first and second inferior veins near together at the base.

1. MESERA TRISTIS.

Mas. *Ferrugineo-fusca; antennæ nigræ; genua fulva; alæ nigro-cinereæ, anticæ obscuriores.* Fœm.?—*Pallidior; alæ anticæ fascia subapicali undulosa tenui cana.*

Male. Ferruginous-brown. Antennæ black. Legs tawny. Wings blackish gray; fore wings a little darker and more opaque than the hind wings. Length of the body 5 lines; of the wings 12 lines.

a. Venezuela. From Mr. Dyson's collection.

Female? Paler. Fore wings with a slender undulating hoary band near the exterior border. Length of the body 7½ lines; of the wings 19 lines.

a. Bogotà. From Mr. Isaacson's collection.

Genus 55. DASYCHIRA.

Corpus sæpissime robustum. Palpi porrecti, pilosi, caput vix superantes; articulus 1us brevis; 3us gracilis, 2i dimidio multo brevior. Abdomen alas posticas non aut vix superans. Pedes sæpissime validi, antici pilis longis nonnunquam vestiti; tibiæ posticæ calcaribus quatuor sat longis. Alæ sat latæ, sæpissime longiusculæ; anticæ ad costam subconvexæ. *Mas.*—Antennæ latissime pectinatæ. *Fœm.*—Antennæ subpectinatæ.

Dasychira, *Steph. Ill. Brit. Ent. Haust.* ii. 58.
Phalæna-Bombyx, p., *Linn.; Berk.; Don.; Stew.; Turt.*
Phalæna, p., *Deg.; Wilkes.*
Bombyx, p., *Fabr.; Hübn.; Haw.*
Laria, p., *Schr.*
Dasychira, p., *Hübn.*
Orgya, p., *Ochs.; Hübn.; Boisd.*
Oregyia, p., *Meig.*

Body generally stout. Palpi porrect, pilose, extending very little beyond the head; first joint short; third slender, much less than half the length of the second. Abdomen not or hardly extending beyond the hind wings. Legs generally stout; fore legs with very long hairs; hind tibiæ with four moderately long spurs. Wings moderately broad, generally rather long. Fore wings very slightly convex along the costa, hardly angular at the tips, oblique

or very oblique along the exterior border; interior angle more or less rounded; first and second inferior veins nearly contiguous; third about four times further from the fourth than from the second. *Male.*—Antennæ very deeply pectinated. *Female.*—Antennæ minutely pectinated.

NOTE.—*Dasychira* may be divided into several genera. *O. selenitica* and *O. Terebinthi* are two forms, distinct from each other and from *O. pundibunda* and *O. fascelina*, which are the types of the genus.

Europe.

A. Alæ posticæ angulo anali innotato.
  A. Alæ anticæ fuscæ. - - - - - selenitica, *Ochs.*
  B. Alæ anticæ cinereæ, signaturis obsoletis albo fulvoque adspersis. - - - - - - - - fascelina, *Linn.*
  C. Alæ anticæ cinereæ, nigro guttatæ et albido variæ. Terebinthi, *Herr.-Schæff.*
B. Angulus analis alarum posticarum macula nigricante.
  A. Alæ anticæ lunula media obsoleta pallidius cincta. pudibunda, *Linn.*
  B. Alæ anticæ lunula media nigro-cincta. Abietis, *Wien. Verz.*

1. DASYCHIRA PUDIBUNDA.

Alæ albo-cinereæ; anticæ macula media lunari strigisque tribus undatis fuscis, striga basali obsoleta, striga posteriore vix undulata, solum in venis 4 et 5 fracta.

Dasychira pudibunda, *Steph. Ill. Brit. Ent. Haust.* ii. 59, 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 134, 14, 3. *Speyer, Ent. Zeit. Stett.* xiii. 317, 6.

Phalæna-Bombyx pudibunda, *Linn. Syst. Nat.* ii. 824; *Foun. Suec.* 1118. *Gmel. ed. Syst. Nat.* i. 5, 2427, 54. *Berk. Syn.* i. 137. *Don. Nat. Hist. Brit. Ins.* xvi. pl. 576. *Stew. El. Nat. Hist.* ii. 152. *Turt. Syst. Nat.* iii. 208.

Phalæna porrecta alba, *Deg. Gen.* 38, 56.

——— ———, *List. Goëd.* (Angl.) 82, f. 81 (Lat.), 193, f. 81. *Albin, Nat. Hist. Engl. Ins.* pl. 26, f. 38, a—d. *Roes. Ins.* i. pl. 38.

Phalæna pudibunda, *Wilkes*, 30, pl. 63.

Bombyx pudibunda, *Fabr. Ent. Syst.* iii. 1, 438, 97. *Oliv. Enc. Méth.* v. 60, 130. *Wien. Verz.* 53, G. 1. *Borkh. Schmett.* iii. 320, 120. *Esp. Schmett.* iii. pl. 54. *Hübn. Bomb.* pl. 21, f. 84, 8, 5. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, D. b. f. 1. *God. Pap. de France*, iv. 239, pl. 22, f. 2, 3.

Orgya pudibunda, *Ochs. Schmett.* iii. 209, 1; iv. 56, 1. *Boisd. Ind. Méth. Lep. Eur.* 67, 550.
Oregyia pudibunda, *Meig. Handb.* 124, 52; *Syst. Beschr. Eur. Schmett.* iii. 16, 4, pl. 82, f. 1.
Bombyx juglandis, *Hübn. Bomb.* pl. 21, f. 84, 85.
Bombyx pudibundus, *Haw. Lep. Brit.* 101.
Orgyia pudibunda, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Dasychiræ Canescentes*), 162, 1680.

a—o. England. From Mr. Stephens' collection.
p. England. From Mr. Foxcroft's collection.
q—v. England.
u—x. Europe. From M. Becker's collection.
y—z. ——— ?
aa. North China. From Mr. Cuming's collection.

2. Dasychira fascelina.

Alæ cinereæ; anticæ nigro irroratæ, strigis duabus fulvo-fuscis repandis, linea limbali nigra in costis interrupta.

Dasychira fascelina, *Steph. Ill. Brit. Ent. Haust.* ii. 58, 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 124, 12, 2. *Speyer, Ent. Zeit. Stett.* xiii. 317, 5.
Phalæna-Bombyx fascelina, *Linn. Syst. Nat.* ii. 825; *Faun. Suec.* 1119. *Gmel. ed. Syst. Nat.* i. 5, 2428, 55. *Berk. Syn.* i. 137, *Don. Nat. Hist. Brit. Ins.* xvi. pl. 576. *Stew. El. Nat. Hist.* ii. 152. *Turt. Syst. Nat.* iii. 208.
Phalæna porrecta cana, &c., *Dig. Gen.* 38, 57.
——— ———, *List. Goëd.* (Angl.) 81, f. 80; (Lat.) 192, f. 80. *Albin, Nat. Hist. Engl. Ins.* pl. 26, f. 39, e—h. *Roes, Ins.* pl. 37.
Phalæna fascelina, *Wilkes*, 30, pl. 62; pl. 7, f. 5.
Bombyx fascelina, *Fabr. Ent. Syst.* iii. 1, 439, 98. *Wien. Verz.* 55, G. 3. *Borkh. Schmett.* iii. 317, 119. *Esp. Schmett.* iii. pl. 55. *Oliv. Enc. Méth.* v. 61; 131. *God. Pap. de France*, iv. 244, pl. 23, f. 1.
Orgya fascelina, *Ochs. Schmett.* iii. 214, 3; iv. 56, 3. *Boisd. Ind. Méth. Lep. Eur.* 67, 551.
Oregyia fascelina, *Meig. Handb.* 125, 54; *Syst. Beschr. Eur. Schmett.* iii. 17, 6, pl. 82, f. 2.
Bombyx Medicaginis, *Hübn. Bomb.* pl 21, f. 81. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, D. a, b. f. 2.
Bombyx fascelinus, *Haw. Lep. Brit.* 102.

Orgyia fascelina, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Dasychiræ Canescentes*) 161, 1676.

a—h. England. From Mr. Stephens' collection.
i—r. England.
s—u. Europe. From M. Becker's collection.

3. Dasychira Abietis.

Alæ anticæ lunula media nigro-cincta, striga basali acute bidentata, posteriore ex arcubus acutis composita, quorum maximus lunulam mediam tangit.

Dasychira Abietis, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 134, 14, 4. *Speyer, Ent. Zeit. Stett.* xiii. 318, 7.
Orgyia Abietis, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Dasychiræ Canescentes*) 162, 1679.
Bombyx Abietis, *Wien. Verz.* 55, G. 2. *Borkh. Schmett.* iii. 324, 121. *Esp. Schmett.* iii. pl. 82, f. 1; pl. 91, f. 2. *Hübn. Bomb.* pl. 21, f. 82, 83. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, D. b. f. 2. *Freyer, Beitr.* pl. 3. *God. Pap. de France*, iv. 242, pl. 23, f. 2, 3.
Orgya Abietis, *Ochs. Schmett.* iii. 212, 2. *Boisd. Ind. Méth. Gen. Lep.* 67, 550.
Oregyia Abietis, *Meig. Handb.* 124, 53; *Syst. Beschr. Eur. Schmett.* iii. 16, 5, pl. 82, f. 3. *Freyer, Neue Lepid. Brit.* i. 16, 9. pl. 8.

a. Europe. From M. Becker's collection.

4. Dasychira selenitica.

Fusca; ciliæ lucidiores alarum anticarum nigro maculatæ; lunula media lineaque undulata albæ.

Var.? *Cano-fusca; abdomen nigricans, pilis apicalibus nigricantibus et canis; alæ subtus testaceæ anticæ, fuscæ, maculis basalibus et costalibus obscurioribus, discis albidis fusco ex parte conspersis; posticæ anticis obscuriores, testaceo bistrigatæ.*

Bombyx paradoxa, *Fabr. Ent. Syst.* iii. 1, 477, 218. *Borkh. Schmett.* iii. 466.
Bombyx selenitica, *Esp. Schmett.* iii. pl. 82, f. 5; pl. 88, f. 2; pl. 94, f. 4, 5. *God. Pap. de France*, iv. 247, pl. 24, f. 5, 6.
Bombyx Lathyri, *Hübn. Bomb.* pl. 20. f. 79, 80. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, D. a, b. f. 1.

Orgya selenitica, *Ochs. Schmett.* iii. 216, 4; iv. 56, 4. *Boisd. Ind. Méth. Lep. Eur.* 68, 553.

Oregyia selenitica, *Meig. Syst. Beschr. Eur. Schmett.* iii. 18, 7, pl. 82, f. 5.

Gynæphora selenitica, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Dasychiræ Undatæ*) 161, 1674.

Dasychira selenitica, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 134, 11, 1. *Freyer, Ent. Zeit. Stett.* v. 29, 397. *Dœbner, Ent. Zeit. Stett.* vi. 217. *Speyer, Ent. Zeit. Stett.* xiii. 317, 4.

Var.? Hoary brown. Antennæ hoary, with brown branches. Abdomen blackish, with blackish and hoary hairs at the tip. Fore wings brown, with some dark brown spots towards the base and along the costa; disks mostly whitish, partly powdered with brown; cilia with alternate brown and pale testaceous bands; under side pale testaceous, brown in front for two-thirds of the length from the base. Hind wings darker brown than the fore wings, with two testaceous streaks which diverge from the base to the disk; under side pale testaceous, brown in front, at the base and along the outer border, and with a brown discal streak; cilia pale testaceous.

a—e. Europe. From M. Becker's collection.

5. Dasychira Terebinthi.

Alæ læte cinereæ, fusco mixtæ, striga anteriore e punctis, posteriore e lunulis compositis, umbraque media fuscis, puncto medio ciliisque in venis albidis.

Liparis Terebinthi, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 135, 18, 4.

Europe.

North America.

A. Alæ nigro non fasciatæ. - - - - Achatina, *Abbot.*
B. Alæ anticæ nigro fasciatæ. - - - - Rossii, *Curtis.*

6. Dasychira Achatina.

Cristata; alæ anticæ cinereæ, striga antice alba postice intersecta arcu nigro desinente in puncto anguli postice albo.

Phalæna Achatina, *Abbot and Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 153, pl. 77.

Orgyia Achatina, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Dasychiræ Canescentes*, 161, 1677.

Georgia.

7. Dasychira Rossii.

Subcinerea, semihyalina; alæ anticæ fascia media e lineis duabus undulatis, macula intermedia, fasciaque brevi nigricantibus; posticæ pallidæ margine nigricante.

"Transparent gray. Fore wings with two blackish waved lines, forming a fascia across the middle, with a spot between them, and a sinuated abbreviated band beyond them. Hind wings cream-colour, ochreous along the hind border, with a broad blackish margin. Larva feeds on *Saxifraga tricuspidata* and *S. oppositifolia*."

Laria Rossii, *Curtis, Append. Ross. Narr. 2nd Voy.* lxx. 16, pl. A, f. 10.

Arctic America.

South America.

8. Dasychira? cinerea.

Mas et fœm. *Cinerea; caput albidum; thorax fascia antica biarcuata albida; abdomen albidum maculis dorsalibus nigris; alæ anticæ macula discali albida.* Mas.—*Alæ anticæ strigis nigris, fascia basim versus albida, fascia arcuata exteriore cana nigro intus marginata guttisque marginalibus albis; posticæ albæ cinereo late marginatæ.* Fœm.—*Alæ anticæ fascia basim versus nigra albido marginata, maculis quatuor discalibus fasciisque duabus exterioribus arcuatis albidis; posticæ pallide cinereæ fascia media arcuata alba nigro marginata.*

Phalæna cinerea, *Anon. Ins. Surinam*, i. 21, pl. 7.

Surinam.

This species may be one of the *Arctiidæ*.

Africa.

9. Dasychira atomaria.

Mas. *Alba; caput luteum, postice album; palpi lutei; antennæ fuscæ, supra albidæ; abdomen luteum, subtus e guttis nigris bivittatum; pedes pilis longis pallide flavis dense vestiti; alæ fusco confertim punctatæ, fascia e guttis nigris obliqua discali, subtus testaceæ.*

Male. White. Head luteous, white behind. Palpi luteous Antennæ brown, whitish above. Abdomen luteous, with a row of black dots on each side beneath. Legs thickly clothed with long pale yellow hairs. Wings with numerous brown points; each with an oblique discal band of black dots; under side of fore wings testaceous, of hind wings slightly testaceous. Length of the body 6—7 lines; of the wings 18—20 lines.

a. South Africa. Presented by Dr. A. Smith.
b. Interior of South Africa. Presented by the late Earl of Derby.
c. Sierra Leone. Presented by the Rev. D. F. Morgan.

The Sierra Leone specimen is of a much purer white than the others, the brown points on the wings are almost wanting, and the black dots in the bands are much fewer and smaller.

Fœm.? Mari *similis; abdomen nigro non guttatum; tarsi fasciis fuscis; alæ e punctis fuscis fasciis duabus obliquis submarginalibus, nigro non guttatæ.*

Female? Like the male Abdomen without black dots. Tarsi with brown bands. Wings without black dots, but with brown points forming two oblique submarginal bands. Length of the body 8 lines; of the wings 22 lines.

a. Congo. Presented by Sir J. Richardson.

Asia.

A. Alæ albæ. - - - - - - - antica, *Walk.*
B. Alæ obscuræ.
A. Alæ bifasciatæ. - - - - convergens, *Walk.*
B. Alæ quadrifasciatæ. - - - - - varia, *Walk.*

Asia.

10. DASYCHIRA ANTICA.

Mas. *Alba; caput antice nigrum; antennæ fuscæ; thorax fascia antica lutea; abdomen nigro fasciatum, alas non superans; pedes antici nigricantes; alæ anticæ fasciis tribus obliquis subundulatis fuscis.*

Male. White. Head in front and palpi black. Antennæ brown. Thorax with a pale luteous band in front. Abdomen above with a black band on the fore border of each segment, not extending beyond the hind wings. Fore legs mostly black. Fore wings with three slender oblique slightly undulating brown bands;

first very near the base; second at one-third of the length; third about the middle. Length of the body 6 lines; of the wings 16 lines.

a. North India. From Mr. Stevens' collection.

11. Dasychira convergens.

Mas. *Testacea; palpi et pedes antici fulvi; thorax et abdomen fusco conspersa; alæ anticæ fusco conspersæ, fasciis duabus una fusca altera ferruginea; posticæ supra cervinæ.*

Male. Testaceous. Palpi and fore legs tawny. Thorax and abdomen flecked with brown. Palpi porrect, pilose, extending far beyond the head; second joint very much longer than the first; third conical. Fore wings nearly straight along the costa, rounded at the tips, very slightly oblique along the exterior border, flecked above with brown; two almost straight bands; first brown, oblique, extending from two-thirds of the length of the costa to the middle of the interior border, passing a little beyond the brown discal dot; second ferruginous, nearly upright, extending from a little beyond the first on the costa to a little beyond the interior angle; fringe brown; under side flecked with brown towards the tip; first and second inferior veins contiguous at the base; third about thrice further from the fourth than from the second. Hind wings fawn-colour and unflecked above, pale along the costa, testaceous and flecked with brown beneath. Legs stout, pilose; hind tibiæ with four long spurs. Length of the body 8 lines; of the wings 20 lines.

a. Silhet. From Mr. Stainforth's collection.

12. Dasychira varia.

Mas. *Pallide cinerea, subtus cana; palpi supra apices versus nigricantes; antennæ ramis fulvis; tibiæ anticæ supra ex parte nigræ subtus fulvæ, tarsi antici nigro fasciati; alæ anticæ fasciis quatuor nigricantibus, posticæ canæ trifasciatæ maculaque discali pallide fusca.*

Male. Pale cinereous, hoary beneath. Palpi blackish above towards the tips. Antennæ with tawny branches. Fore tibiæ partly black above, tawny beneath; fore tarsi with black bands. Fore wings with four blackish bands; first band slender, very near the base; second broad and diffused, at one-third of the length; third and fourth beyond the middle, slender, undulating and composed of

lunules. Hind wings hoary, with a pale brown discal spot, and two pale bands, and a darker marginal band. Length of the body 9 lines; of the wings 25 lines.

a. East Indies. In Mr. Saunders' collection.

Fœm.? *Albida; caput, thorax et alæ anticæ supra albido cana; alæ anticæ obsolete fasciatæ, posticæ macula discali pallide fusca.*

Female. Whitish. Head, thorax and fore wings above whitish hoary. Fore wings with some indistinct and almost obsolete traces of bands like those of the male; a slight whitish undulating band near the exterior border. Hind wings with a very pale brown discal spot, which is more distinct beneath than above. Length of the body 9 lines; of the wings 28 lines.

a. East Indies. In Mr. Saunders' collection.

Country unknown.

13. Dasychira Tephra.

Mas. *Viridi-fusca; abdomen pallide fuscum; alæ anticæ ocella discali fasciisque quatuor undulosis nigris; posticæ pallide fuscæ fasciis tribus fuscis.* Fœm.—*Pallidior; alæ anticæ macula magna discali lituraque postica albis; posticæ fusco bifasciatæ.*

Dasychira vulgaris Tephra, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* ii. *Veræ*, iv. *Dasychiræ C. vulgares*, a. f. 1—4.

Orgyia Tephra, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Dasychiræ Canescentes*), 161, 1678.

Male. Greenish brown. Abdomen and hind wings pale brown. Fore wings with a black discal ocellus, and with four slender undulating black bands; two bands between the ocellus and the base of the wing, and two beyond the ocellus. Hind wings with two brown bands, the first discal, the second submarginal, very broad, accompanied on its inner side by a very slender brown band. *Fem.*—Paler. Fore wings with a large white black-streaked spot instead of the ocellus, and with a small white mark at two-thirds of the length of the interior border. Hind wings with two brown bands, of which the inner one is much broader than the outer one.

14: DASYCHIRA LEUCOPHÆA.

Mas. *Obscure fusca; alæ anticæ fasciis tribus ferrugineis (1a et 2a nigro marginatis) necnon litura discali alteraque subapicali albidis; posticæ ferrugineo marginatæ.* Fœm.—*Ferruginea; alæ anticæ cinereæ, apud medium albidæ, fasciis tribus ferrugineis, 1a fusca alboque marginata, 2a 3aque connexis fusco marginatis; posticæ ferrugineæ, fascia latissima cinerea.*

Orgyia leucophæa, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Veræ*, iv. *Dasychiræ B. Canescentes*, i. f. 1—4.

Male. Dark brown. Fore wings with three ferruginous bands; first and second bordered with black; first at one-third of the length of the wing; second beyond two-thirds of the length; third along the exterior border, with black dots; a whitish mark at the tip of the discal areolet, and another near the tip of the wing. Hind wings with a ferruginous border. *Fem.*—Ferruginous. Fore wings gray, mostly whitish in the middle and along the exterior border, which is ferruginous; three ferruginous bands; first bordered with white and brown; second bordered with brown; third short, very oblique, connected at its hind end with the second in the disk of the wing; some brown along its inner side. Hind wings pale ferruginous, with a very broad gray middle band.

Genus 56. LYMANTRIA

Mas et fœm. Corpus robustum aut sat gracile. Palpi mediocriter longi, caput paullo superantes; articulus 2us 1o fere quadruplo longior; 3us conicus, minimus. Pedes validi, tibiæ posticæ calcaribus quatuor parvis. Alæ longiusculæ, sat latæ. *Mas.*—Corpus gracilius. Antennæ late aut latissime pectinatæ. Abdomen alas posticas non superans. Alæ sæpe latiores. *Fœm.*—Corpus magis crassum. Antennæ serratæ aut subpectinatæ, breviores. Abdomen alas posticas paullo superans, apice nonnunquam acuminatum, nonnunquam obtusum et dense lanuginosum.

Phalæna-Bombyx, *Linn.; Berk.; Don.; Stew.; Turt.*
Phalæna, *Wilkes.*
Bombyx, p., *Fabr.; Hübn.; Haw.; God.*
Laria, p., *Schr.*
Hypogymna, p., *Hübn.*
Lymantria, *Hübn. Verz. Schmett.* 160. *Steph. Cat. Brit. Lep.* 49.
Liparis, p., *Ochs.; Boisd.*
Porthetria, p., *Hübn. Verz. Schmett.* 160.
Porthetria, *Westw.*

Hypogymna, *Steph. Ill. Brit. Ent. Haust.* ii. 55.
Psilura, *Steph. Ill. Brit. Ent. Haust.* ii. 57. *Herr.-Schæff.*; *Westw.*

Male and female. Body stout or rather slender, with smooth hairs. Proboscis very short or obsolete. Palpi moderately long, extending a little beyond the head; second joint about four times the length of the first; third conical, very minute. Legs stout, slightly pilose; hind tibiæ with four minute spurs. Wings rather long and broad. Fore wings hardly convex along the costa, rounded at the tips; first and second inferior veins contiguous at the base; third hardly further from the fourth than from the second. Frena composed of several bristles. *Male.*—Antennæ moderately or deeply pectinated. Abdomen more or less slender, not extending beyond the hind wings. Wings often broader than those of the female. *Female.*—Antennæ serrated or minutely pectinated, much shorter than those of the male. Abdomen more or less stout, extending more or less beyond the hind wings, sometimes pointed, sometimes thickly lanuginose at the tip.

1. Lymantria Monacha.

Alba; abdomen versus anum roseum; alæ anticæ punctis antice albo atro undatæ, puncto et lunula medio nigris.

Phalæna-Bombyx Monacha, *Linn. Syst. Nat.* ii. 821; *Faun. Suec.* 1130. *Gmel. ed. Syst. Nat.* i. 5, 2421, 43. *Berk. Syn.* i. 136. *Don. Nat. Hist. Brit. Ins. V. M.* pl. 227. *Stew. El. Nat. Hist.* ii. 130. *Turt. Syst. Nat.* iii. 211.
Phalæna Monacha, *Wilkes*, 22, pl. 42.
Bombyx Monacha, *Fabr. Ent. Syst.* iii. 1, 446, 119. *Wien. Verz.* 52, D. 5. *Borkh. Schmett.* iii. 307, 116. *Esp. Schmett.* iii. pl. 37. *Hübn. Bomb.* pl. 19, f. 74; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, C. a. f. 2. *God. Pap. de France*, iv. 259, pl. 25, f. 3, 4.
Bombyx Monachus, *Haw. Lep. Brit.* 87.
Laria Monacha, *Schr. Meig. Handb.* 122, 46; *Syst. Beschr. Eur. Schmett.* iii. 5, 5, pl. 81, 8.
Liparis Monacha, *Ochs. Schmett. von Eur.* iii. 192, 4; iv. 55, 4. *Freyer, Neue Lepid. Brit.* ii. 5, 177, pl. 98, f. 2, 3.
Lymantria Monacha, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Undatæ*), 160, 1667.
Psilura Monacha, *Steph. Ill. Brit. Ent. Haust.* ii. 57, 1. *Herr.-Samml. Eur. Schmett. Suppl.* ii. *Text*, 137, 22, 1.

Var. β. *Nigro-cinerea; abdomen sordide albidum vitta dorsali apice maculisque lateralibus nigris; alæ anticæ nigro variæ, fascia obliqua undulosa subapicali albida; posticæ fuscescentes.*

Bombyx eremita, *Hübn. Bomb.* pl. 57, f. 246.
Lymantria eremita, *Hübn. Verz. Schmett.* 160, 1668.

Var. γ. *Fusca; abdomen roseum, incisuris et ano fuscis.*

Psilura Atlantica, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 137, 23, 2.

a—q. England. From Mr. Stephens' collection.
r—z. England.
aa—cc. Europe. From M. Becker's collection.

2. LYMANTRIA DISPAR.

Alæ maris *cinereo-fuscoque nebulosæ*, fœminæ *albidæ nigro striatæ.*

Phalæna-Bombyx dispar, *Linn. Syst. Nat.* ii. 821. *Gmel. ed. Syst. Nat.* i. 5, 2422, 44. *Berk. Syn.* i. 136. *Don. Nat. Hist. Brit. Ins.* v. pl. 163. *Stew. El. Nat.* ii. 150. *Turt. Syst. Nat.* iii. 217.
Phalæna dispar, *Wilkes*, 22, pl. 42.
——— ———, *Roës. Ins.* i. pl. 3.
Bombyx dispar, *Fabr. Ent. Syst.* iii. 1, 437, 94. *Oliv. Enc. Méth.* v. 59, 126. *Wien. Verz.* 52, D. 6. *Borkh. Schmett.* iii. 312, 118. *Esp. Schmett.* iii. pl. 38. *Hübn. Bomb.* pl. 19, f. 75, 76; *Larv. Lepid.* iii. *Bomb.* ii. *Veræ*, C. c. f. 2. *God. Pap. de France*, iv. 256, pl. 25, f. 1, 2.
Bombyx disparus, *Haw. Lep. Brit.* 88.
Porthetria dispar, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Undatæ*), 160, 1664. *Westw. & Humph. Brit. Moths*, i. 85, pl. 17, f. 1—3.
Liparis dispar, *Ochs. Schmett.* iii. 195, 5; iv. 55, 5. *Boisd. Ind. Méth. Lep. Eur.* 66, 542. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 135, 17, 3. *Speyer, Ent. Zeit. Stett.* xiii. 318, 10.
Laria dispar, *Meig. Handb.* 122, 47; *Beschr. Eur. Schmett.* iii. 6, 6, pl. 81, f. 7.
Hypogymna dispar, *Steph. Ill. Brit. Ent. Haust.* ii. 56, 1.
Orygia dispar, *Bellier de la Chavignerie, Ann. Soc. Ent. Fr.* 2me *Sér.* vii. 173.

a—v. England. From Mr. Stephens' collection.
u—z. England.
aa, bb. Europe. From M. Becker's collection.
cc—ee. Europe.

South America.

3. LYMANTRIA RIVULOSA.

Alæ fuscæ; strigis transversis undulatis pallidioribus et obscurioribus; anticæ fascia lata centrali alteraque basali badiis.

Phalæna (Bombyx) rivulosa, *Drury, App.* ii. *Oliv. Enc. Méth.* v. 38, 54.

Liparis? rivulosa, *Westw. ed. Drury*, ii. 28, pl. 14, f. 5.

Surinam.

Africa.

4. LYMANTRIA VACILLANS.

Mas. *Alba; caput et palpi testacea, illum subtus subroseum; antennæ fuscæ; thorax antice et apud discum subroseum; abdomen pallide testaceum; pedes subrosei; alæ anticæ maculis fasciisque cervinis.*

Male. White. Head and palpi testaceous, the former slightly rosy beneath. Antennæ brown. Thorax rosy along the fore border, and with a slight rosy tinge on the disk. Abdomen pale testaceous. Legs tinged with rosy red. Fore wings with fawn-coloured spots and incomplete undulating bands, this colour prevailing most along the costa and at the tip of the discal areolet. Length of the body 9 lines; of the wings 22 lines.

a. Congo. Presented by Sir J. Richardson.

5. LYMANTRIA? MUTATA.

Fœm. *Cervina; alæ anticæ fasciis quatuor angustis obliquis angulosis obscure fuscis, striga subtus diffusa basali rufescente; posticæ supra rufescentes fascia una fusca.*

Female. Fawn-colour, pale beneath. Fore wings with four dark brown, slender, more or less oblique somewhat zigzag bands; under side with a broad diffuse reddish streak near the base. Hind wings reddish above, with a single brown band, which is not far from the exterior border; under side with two bands. Length of the body 10 lines; of the wings 22 lines.

a. Port Natal. From M. Gueinzius' collection. An injured specimen.

Asia.

A. Alæ posticæ plus minusve roseæ.
  A. Alæ anticæ albæ, fusco fasciatæ. - - grandis, *Walk.*
  B. Alæ anticæ fuscæ. - - - - - lunata, *Cram.*
B. Alæ posticæ non roseæ.
  A. Alæ posticæ albæ aut albidæ.
    A. Abdomen plus minusve roseum.
      a. Alæ anticæ albæ.
        i. Alæ anticæ non guttatæ. - - lineata, *Walk.*
        ii. Alæ anticæ guttatæ. - - - - Asœtria, *Hübn.*
      b. Alæ anticæ cervinæ. - - - obsoleta, *Walk.*
    B. Abdomen luteum.
      a. Alæ posticæ vix marginatæ. - - concolor, *Walk.*
      b. Alæ posticæ late marginatæ. - - marginata, *Walk.*
    C. Abdominis latera lutea. - - - - munda, *Walk.*
    D. Abdomen album.
      a. Alæ anticæ nigro variæ. - - - superans, *Walk.*
      b. Alæ anticæ fusco variæ. - - - Beatrix, *Cram.*
      c. Alæ anticæ cervino variæ. - - - Brotea, *Cram.*
  B. Alæ posticæ fuscæ. - - - - incerta, *Walk.*

6. Lymantria grandis.

Fœm. *Alba; caput roseum, antice nigrum; palpi rosei, fascia nigra; antennæ nigræ; thorax nigro septem guttatus; abdomen roseum, apice album, vittis duabus ventralibus unaque dorsali macularibus nigris; pedes rufi, nigro fasciati; alæ anticæ basi et apud marginem exteriorem roseo nigroque notatæ fasciis tribus irregularibus et indentatis fuscis; posticæ roseæ, fascia submarginali subundulosa guttisque marginalibus fuscis.*

Female. White. Head rosy red, mostly black in front. Palpi rosy red, with a black band. Antennæ black. Thorax with seven black dots, four in a line between the fore wings, two in front, and one intervening, the latter with a red spot on each side. Abdomen rosy red, white towards the tip, with one macular black stripe above, and two beneath. Legs red, with black bands; fore tibiæ with some white hairs on the outer side. Fore wings with some rosy and black marks at the base and along the exterior border, and with three brown irregular and much indented bands, the first widely interrupted, the second oblique, the third submarginal and very imperfect. Hind wings rosy red, with a slightly undulating submarginal

brown band, which is accompanied by brown marginal spots. Length of the body 15 lines; of the wings 44 lines.

a. Ceylon. From the Rev. J. Wenham's collection.

7. Lymantria lineata.

Mas. *Alba; tibiæ anteriores nigro maculatæ; tarsi nigricantes; alæ anticæ fascia basim versus gracili angulari nigra fasciisque nonnullis obliquis undulosis pallide fuscis.*

Male. White. Anterior tibiæ with black spots. Tarsi blackish. Fore wings with a slender angular black band at one-fourth of the length, and with some slight oblique undulating very pale brown bands beyond the discal areolet. Length of the body 11 lines; of the wings 34 lines.

a, *b*. Silhet. Presented by E. Doubleday, Esq.

Female? White. Palpi and antennæ black. Abdomen rosy red, whitish at the tip. Legs black; coxæ and femora with red stripes; tibiæ fringed with white hairs. Wings with brown dots along the borders. Fore wings with three brown bands; first very near the base; second nearly upright, before one-fourth of the length; third beyond the middle, oblique. Length of the body 8—12 lines; of the wings 32—36 lines.

Var. β. Fore wings with a brown dot on the discal areolet; third band dilated towards the hind border; a brown subapical spot on the costa.

a. Silhet. Presented by E. Doubleday, Esq.
b. East Indies. From Mr. Argent's collection.

8. Lymantria munda.

Mas et fœm. *Pallidissime cervina; caput antice fuscum, macula postica nigra; palpi nigri; antennæ basi pallide luteæ, ramis nigris; thoraæ e maculis nigris trifasciatis; abdomen fasciis fuscis maculisque dorsalibus nigris, subtus fuscescens, lateribus apiceque subtus luteis; pedes fuscescentes; alæ anticæ guttis nigris liturisque submarginalibus fuscis, marginem exteriorem versus albidæ strigis lanceolatis cervinis nigro ex parte marginatis; posticæ albidæ, maculis cuneatis marginalibus.*

Male and fem. Very pale fawn-colour. Head brown in front, and with a black spot behind. Palpi black. Antennæ pale luteous at the base; branches black. Thorax with three bands of black

spots, two in front, five in the middle, and two behind. Abdomen with brown bands, and with a dorsal row of black spots, luteous along each side and at the tip beneath; under side and legs brownish. Fore wings with some black dots towards the base and in the disk, and along the exterior border, whitish towards the exterior border, near which there is a row of angular brown marks; the fawn-coloured part emits into the whitish part long lanceolate streaks, which are partly edged with black; under side more dusky. Hind wings whitish, more dusky towards the base and beneath, with a submarginal row of brown cuneiform spots, and a marginal row of brown dots. Length of the body 9—13 lines; of the wings 28—34 lines.

a, *b*. Silhet. Presented by E. Doubleday, Esq.
c. Silhet. From Mr. Argent's collection.

9. LYMANTRIA CONCOLOR.

Fœm. *Alba; palpi, antennæ, thoracis vitta dorsalis et pectus antice nigra; abdomen luteum, basi album, fasciis subtus nigris; pedes nigri fasciis albis; alæ anticæ testaceo-albæ, guttis basalibus, fasciisque tribus undulosis nigris, fascia 2a triplici; posticæ fascia submarginali undulosa pallide fusca.*

Fem. White. Head luteous on each side behind. Palpi and antennæ black. Thorax with a black dorsal stripe. Pectus black in front. Abdomen luteous, white at the base, with black bands beneath. Legs black, with white bands. Fore wings testaceous-white, with black dots near the base, and with three undulating slender black bands; first nearly upright; second oblique, double or triple; third submarginal. Hind wings with a pale brown undulating submarginal band. Length of the body 12 lines; of the wings 33 lines.

a. Sikkim Himalaya. From Dr. Hooker's collection.

10. LYMANTRIA SUPERANS.

Fœm. *Albida; caput macula postica nigra, subtus nigrum; palpi antennæque nigræ; thorax macula antica nigra; abdomen subtestaceum, basi albidum, e maculis nigris bivittatum; pedes nigri, tibiis albo bifasciatis; alæ anticæ fasciis tribus undulosis nigris, basi et apud marginem exteriorem nigro guttatæ; posticæ fasciu gracili undulosa submarginali fusca.*

Female. Whitish. Head with a black spot on the hind border, black beneath. Palpi and antennæ black. Thorax with a black

spot in front. Abdomen slightly testaceous, except at the base, with a row of black spots on each side above and beneath. Legs black; tibiæ with two white bands. Fore wings with some black dots towards the base and along the exterior border, and with three undulating slender black bands, the first at one-fourth of the length, the second treble, the third submarginal. Hind wings with a brown slender undulating submarginal band. Length of the body 8—12 lines; of the wings 26—34 lines.

a. Sikkim Himalaya. From Dr. Hooker's collection.
b. North India. From Mr. Stevens' collection.

11. Lymantria marginata.

Fœm. *Albida; palpi antennæque nigra; thorax fascia antica nigra luteo marginata; abdomen luteum vittis supra tribus subtusque duabus e maculis nigris; pedes nigri, tibiis anterioribus albo fasciatis; alæ anticæ fusciis quatuor angulosis irregularibus fuscis; posticæ fusco late marginatæ.*

Female. Whitish. Palpi and antennæ black. Thorax in front with a black band, which is bordered with pale luteous. Abdomen luteous, with one dorsal, two lateral and two ventral stripes of large black spots. Legs black; anterior tibiæ with white bands. Fore wings with four angular and irregular brown bands; the first basal; the second connected towards the hind border with the third, which is double; the fourth submarginal and interrupted. Hind wings with a broad brown border. Under side of the wings with the brown colour more prevalent. Length of the body 9 lines; of the wings 27 lines.

a. Silhet. Presented by E. Doubleday, Esq.

12. Lymantria Beatrix.

Alba; alæ anticæ strigis variis, ocello discali, maculis costalibus guttisque exterioribus fuscis; posticæ nigro late marginatæ.

Phalæna-Bombyx Beatrix, *Stoll, Suppl. Cram. Pap. Exot.* 173, pl. 40, f. 2.

Porthetria Beatrix, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Undatæ*), 160, 1665.

Batavia.

13. Lymantria Brotea.

Alba; antennæ fulvæ; alæ anticæ fasciis quatuor angustis obliquis subundulosis guttisque costalibus discalibus et exterioribus fulvis.

Phalæna-Bombyx Brotea, *Cram. Pap. Exot.* iv. 68, pl. 322, f. E.
Prothetria Brotea, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Undatæ*), 160, 1666.

Coromandel. Amboina.

14. Lymantria Ascetria.

Mas. *Albida; caput macula nigra apud marginem posticum rufescentem; palpi basi nigri; thorax e guttis nigris unifasciatus; abdomen rufescens, e maculis nigris trivittatum; pedes ex parte rufescentes, supra nigro maculati; alæ pallide subcervinæ, anticæ guttis marginalibus nigris fasciisque tribus obliquis angulosis fuscis; posticæ fascia submarginali guttisque marginalibus fuscis.*

Lymantria Ascetria, *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* ii. *Veræ*, iii. *Leucomæ B. Undatæ*, 2, f. 1—4.

Male. Whitish. Head with a black spot on the hind border, which is reddish. Palpi black towards the base. Thorax with a band of four black dots. Abdomen reddish, with three stripes of black spots. Legs partly reddish, with black spots above. Wings more or less slightly tinged with very pale fawn-colour. Fore wings with black dots at the base, along the costa, and by the exterior margin, between which and the black lunate mark there are three zigzag oblique brown bands. Hind wings with a brown submarginal band, which is accompanied by brown marginal dots; under side with a brown discal spot. This species has great resemblance to *L. Monacha*, but may be distinguished by the black dots across the thorax, by the black marks at the base of the fore wings, and by the zigzag bands, which are more regular and less oblique. The difference between the two species is more decided on the under side of the wings, where *L. duplex* has no trace of the brown bands which distinguish *L. Monacha*. Length of the body 7 lines; of the wings 18 lines.

a. East Indies. From Archdeacon Clerk's collection.
b. Java. From the East India Company's collection.

15. LYMANTRIA LUNATA?

Mas et fœm. *Fusca; abdomen roseum; alæ anticæ atomis fasciisque e lunulis non bene determinatis obscurioribus; posticæ supra basi roseæ, macula subtus discali obscure fusca.* Mas.—*Alæ posticæ canæ, fascia submarginali pallide fusca.* Fœm.—*Abdomen fasciis dorsalibus ventreque fuscis.*

Phalæna-Bombyx lunata? *Cram. Pap. Exot.* iv. 154, pl. 369, f. c.
Porthetria lunatra? *Hübn. Verz. Schmett.* (*Phalænæ Veræ Leucomæ Undatæ*), 160, 1663.

Amboina.

Male and female. Brown. Abdomen rosy red. Fore wings minutely flecked with darker brown, and with some more or less indistinct and irregular dark brown bands composed of lunules. Hind wings rosy red above towards the base, with a discal darker brown spot beneath. *Male.*—Hind wings hoary, with a submarginal pale brown band. *Female.*—Abdomen brown beneath, and with brown bands above. Length of the body 7—10 lines; of the wings 18—25 lines.

a. East Indies. In Mr. Saunders' collection.

Var. β. Mas. *Abdomen roseum, fasciis fuscis; coxæ roseæ; alæ anticæ pallide cervinæ fusco conspersæ fasciisque nonnullis undulosis fascis; posticæ roseæ marginibus latis fuscis.*

Male. Abdomen with a brown band on each segment. Coxæ mostly rosy. Fore wings pale fawn-colour, flecked with brown, and with several slight undulating brown bands; third inferior vein more than four times further from the fourth than from the second. Hind wings rosy, with broad brown borders. Under side of each of the four wings with a brown angular discal mark. Length of the body 8 lines; of the wings 28 lines.

a. Silhet. From Mr. Stainforth's collection.

Var. γ. Mas. *Fusca; pectus et coxæ ex parte fusco pilosa; abdomen ex parte rufescens, maculis dorsalibus nigris;? alæ pallide cervinæ, anticæ fusco conspersæ fasciisque nonnullis obliquis undulosis incompletis fuscis, posticæ fusco late marginatæ.*

Male. Brown. Pectus and coxæ partly clothed with red hairs. Abdomen partly reddish, with black dorsal spots? Wings dull pale fawn-colour; each one on the under side with a brown

discal spot and two oblique brown bands; first band slender and irregular; second broad and regular. Fore wings convex along the costa, flecked with brown, and with several oblique undulating incomplete brown bands. Hind wings with broad brown borders. Length of the body 10 lines; of the wings 30 lines.

a. Hong Kong. Presented by J. C. Bowring, Esq.

Var. *δ*. Fœm. *Fusca; rufo varia; ? alæ pallide subcervinæ, anticæ fusco conspersæ fasciisque nonnullis obliquis angulosis fuscis, posticæ fusco late marginatæ.*

Female. Brown, varied with red? Wings dingy pale fawn-colour. Fore wings flecked with brown, and with several slight oblique zigzag brown bands. Hind wings with a broad brown border. Length of the body 10 lines; of the wings 26 lines.

In this variety? the third inferior vein of the fore wings is thrice further from the fourth than from the second, whereas in *var. γ* it is not twice further.

a. North India. From Mr. James' collection.

16. LYMANTRIA INCERTA.

Mas. *Pallide fusca; palpi supra nigricantes; antennæ late pectinatæ; abdomen obscure fuscum, fasciis roseis; alæ obscure cervinæ, subtus pallidiores, anticæ fusco conspersæ, basi et apud areolam discalem nigro maculatæ, fascia pallida undulosa subapicali.*

Male. Pale brown. Palpi blackish above. Antennæ deeply pectinated. Abdomen dark brown, with a rosy band on the hind border of each segment. Wings dull fawn-colour, paler beneath. Fore wings with brown flecks, which form some imperfect bands, spotted with black at the base and on the discal areolet, and with a pale undulating band beyond three-fourths of the length; third inferior vein more than twice further from the fourth than from the second. Length of the body 6 lines; of the wings 17 lines.

a. North India. From Mr. Stevens' collection.

17. LYMANTRIA OBSOLETA.

Mas. *Pallide testacea; caput apud oculos et subtus, pectus, abdomen et pedes subrosea; abdomen vitta dorsali gracili fusca; alæ anticæ fasciis obliquis angulosis atomariis fuscis; posticæ albidæ, venis apud margines fuscescentibus.*

Male. Pale testaceous. Head slightly rosy about the eyes and beneath. Pectus, abdomen and legs with a slight rosy tinge. Abdomen with a slender brown dorsal stripe. Fore wings with many brown flecks, some of which are nearly contiguous, and form slight zigzag oblique bands. Hind wings whitish; veins brownish towards the borders. Length of the body 6 lines; of the wings 15 lines.

a. North India. From Mr. James' collection.

Australia.

A. Alæ anticæ albæ. - - - - - maculosa, *Walk.*
B. Alæ anticæ cervinæ. - - - - - antennata, *Walk.*

18. LYMANTRIA MACULOSA.

Mas. *Alba; caput apud oculos palpique rosea; antennæ ramis fuscis; thorax fascia antica rosea maculisque novem nigris; abdomen rufum vitta dorsali alba nigro maculata, subtus e maculis nigris bivittatum; pedes fusco roseoque varii; alæ anticæ e maculis fuscis quadrifasciatæ; posticæ roseæ macula discali fasciaque submarginali fuscis.*

Male. White. Head about the eyes and palpi rosy. Antennæ with brown branches. Thorax with a rosy band in front, and with nine black spots, five in the disk, one on each side and two behind. Abdomen red, with a white dorsal stripe which contains black spots; under side with two rows of black spots. Legs varied with brown and rosy-colour. Fore wings with brown spots, which are mostly arranged in four incomplete and diffuse bands; under side with a brown discal spot. Hind wings rosy, with a slight brown submarginal band, and with a brown discal spot, which is most apparent beneath. Length of the body 9 lines; of the wings 24 lines.

a. New South Wales. From Mr. Hunter's collection.

19. LYMANTRIA ANTENNATA.

Mas. *Cervina; antennæ latissime pectinatæ; thorax antice roseus; abdomen roseum, e maculis nigris trivittatum; coxæ et femora rosea; alæ anticæ fasciis obliquis incompletis maculisque nigris, macula subtus basali rosea; posticæ fusco marginatæ, apud marginem interiorem roseæ.*

Male. Fawn-colour. Antennæ very deeply pectinated. Thorax rosy along the fore border. Abdomen rosy, with three stripes of black spots. Coxæ and femora rosy. Fore wings hardly

convex along the costa, with black spots and oblique incomplete bands, with a rosy mark at the base of the costa beneath; third inferior vein about thrice further from the fourth than from the second. Hind wings bordered with brown, rosy along the inner margin. Length of the body 7 lines; of the wings 21 lines.

a. Richmond River, Australia. From Mr. Leycester's collection.

Genus 57. SOMERA.

Mas. Corpus vix robustum. Palpi validi, subarcuati et ascendentes, subtus pilosi, caput paullo superantes; articulus 2us Io valde longior; 3us obtusus, brevissimus. Antennæ late pectinatæ, corporis dimidio paullo breviores. Abdomen alas posticas superans. Pedes pilosi; tibiæ anticæ subtus fasciculatæ, posticæ calcaribus apicalibus sat longis. Alæ latæ; anticæ apud costam vix convexæ.

Male. Body hardly stout. Proboscis obsolete? Palpi stout, slightly curved and ascending, pilose beneath, extending a little beyond the head; second joint very much longer than the first; third obtuse and very short. Antennæ deeply pectinated, a little less than half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs pilose; fore tibiæ tufted beneath; hind tibiæ with moderately long apical spurs. Wings broad. Fore wings very slightly convex along the costa, rounded at the tips, rather oblique along the exterior border; three inferior veins; second more than four times further from the third than from the first.

1. SOMERA VIRIDIFUSCA.

Mas. *Fusca; caput supra albidum; thorax antice albus, postice viridescens; pectus, abdomen subtus et pedes posteriores testacea; alæ anticæ margines versus viridescentes, fasciis nonnullis obliquis undulosis obscure fuscis; posticæ subtus pallide testaceæ.*

Male. Brown. Head mostly whitish above. Thorax white in front, mostly greenish behind. Pectus, abdomen beneath and posterior legs testaceous. Fore wings with several slight oblique undulating dark brown bands, varied also with a grass-green hue, which is mostly submarginal; under side pale testaceous, tinged with brown on the basal half, except towards the anterior border, with a slight brownish discal band. Hind wings pale testaceous beneath, with a band like that of the fore wings. Length of the body 9 lines; of the wings 22 lines.

a. Silhet. From Mr. Argent's collection.

Genus 58. ENOME.

Mas. Corpus gracile. Palpi breves, parvi, caput non superantes; articulus 2us lo longior; 3us minutus, conicus, acutus. Antennæ latissime pectinatæ, corporis dimidio paullo longiores. Pedes graciles, fere nudi; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ anticæ sat latæ, ad costam subconvexæ; posticæ valde latiores, abdomen dimidio superantes.

Male. Body slender. Proboscis very short or none. Palpi short, small, not extending beyond the head; second joint longer than the first; third minute, conical, acute. Antennæ very deeply pectinated, a little more than half the length of the body. Abdomen extending to about half the breadth of the hind wings. Legs slender, almost bare; hind tibiæ with two small apical spurs. Fore wings moderately broad, slightly convex along the costa, somewhat conical towards their tips; exterior border very oblique; second inferior vein rather nearer to the first than to the third; third full six times further from the fourth than from the second. Hind wings very much broader than the fore wings.

1. ENOME AMPLA.

Mas. Fusca, subtus testacea; alæ fasciis nonnullis undulosis non bene determinatis obscure fuscis, subtus fulvescentes; anticæ maculis basi obscure fuscis.

Male. Brown. Body testaceous beneath. Fore wings with some slight undulating dark brown bands, and towards the base with some dark brown spots; under side mostly tawny. Hind wings with more indistinct bands. Length of the body 6 lines; of the wings 18 lines.

a. Ceylon. Presented by R. Templeton, Esq.
b. North India. From Mr. James' collection.

Genus 59. PTEROLOCERA.

Mas. Corpus hirtum, sat validum. Proboscis non conspicua. Palpi porrecti, longiusculi, valde pilosi, caput superantes; articulus 2us lo valde longior; 3us linearis, longiusculus, obtusus. Antennæ longiusculæ, ramis longissimis. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus apicalibus longiusculis. Alæ latæ, posticæ abdomen superantes.

Male. Body pilose, moderately stout. Proboscis very short or

obsolete. Palpi porrect, rather long, very pilose, extending beyond the head; second joint very much longer than the first; third rather long, linear, obtuse. Antennæ three-fourths of the length of the body, with excessively deep plumes, which are slightly setose. Legs rather long and slender; femora with long hairs; hind tibiæ with two rather long apical spurs. Wings broad. Fore-wings straight along the costa, hardly angular at the tips; second inferior vein much further from the third than from the first; third much nearer to the second than to the fourth. Hind wings extending some distance beyond the abdomen.

1. PTEROLOCERA AMPLICORNIS.

Mas. *Pallide fusca; antennæ testaceæ ramis nigris; pedes nigro varii; alæ pallide cervinæ, fascia obliqua discali fuscescente, venis fuscis.*

Male. Pale brown. Antennæ testaceous, with black plumes. Femora and tibiæ above and tarsi blackish. Wings pale fawn-colour, with a brownish indistinct discal oblique band; veins dark brown, strongly marked. Hind wings with the veins pale towards the base. Length of the body 6—7 lines; of the wings 15—18 lines.

a—c. Adelaide. Presented by the Entomological Club.
d. New Holland. Presented by Major-Gen. Hardwicke.
e. Van Dieman's Land. From Mr. A. J. Smith's collection.
f, g. King George's Sound. Presented by J. G. Children, Esq.

Var. β. *Ferruginea; caput, thorax anterior et alæ anticæ apud costam obscuriora; alæ fascia subobsoleta interrupta obliqua discali fusca.*

Ferruginous. Antennæ testaceous; branches black, with testaceous tips. Hind part of the thorax, abdomen, legs and wings, excepting the costa of the fore wings, pale ferruginous. Wings with a slight interrupted oblique brown discal band, which is hardly apparent, except on the veins, and is more remote from the exterior border than that of *Var. a*; veins like the rest of the wings in colour.

h. Swan River. Presented by Sir J. Richardson.
i. Van Dieman's Land. From A. J. Smith's collection.

Var. γ. Var. β. *similis; thorax ferrugineo-fuscus; alæ obscure fuscæ; fascia nigricante.*

Like *Var.* β. Thorax ferruginous-brown. Wings rather dark brown, with a blackish band.

j. Van Dieman's Land. Presented by Morton Allport, Esq.
k. New South Wales. From Mr. Stevens' collection.

Genus 60. NISAGA.

Mas. Corpus sat gracile. Caput et thorax pilosa. Proboscis brevissima. Palpi porrecti, pilosi, obtusi, caput vix superantes; articulus 2us 1o multo longior; 3us brevissimus. Antennæ latissime pectinatæ. Abdomen lanceolatum, pubescens, alas posticas non superans. Pedes sat graciles; tibiæ posticæ calcaribus duobus longis apicalibus. Alæ latæ.

Male. Body rather slender. Head and thorax pilose. Proboscis very short. Palpi porrect, pilose, obtuse, hardly extending beyond the head; second joint much longer than the first; third very short. Antennæ most deeply pectinated, about half the length of the body. Abdomen lanceolate, pubescent, extending as far as the hind wings. Legs rather slender, hind tibiæ with two long apical spurs. Wings broad. Fore wings hardly convex along the costa, rounded at the tips; exterior border very slightly oblique; three inferior veins; second nearly twice further from the third than from the first.

1. NISAGA SIMPLEX.

Mas. *Cervina, subtus testacea; antennæ ramis fuscis; alæ testaceæ, nitentes, anticæ vittis tribus diffusis atomariis ferrugineis.*

Var. β. *Alæ anticæ vittis nullis.*

Male. Fawn-colour, mostly testaceous beneath. Antennæ with brown branches. Wings testaceous, shining; under side with darker veins. Fore wings partly covered with ferruginous flecks; these form three stripes, which are abbreviated towards the tip; the fore stripe and the middle one are diffuse and indistinctly ramose. Length of the body 7—8 lines; of the wings 16—18 lines.

a, *b*. Silhet. From Mr. Argent's collection.

Var. β. Fore wings without ferruginous flecks.

c—*e*. North India. From Mr. Stevens' collection.

Genus 61. DARALA.

Mas et fœm. Corpus mediocriter robustum, nonnunquam sat gracile. Proboscis obsoleta? Palpi porrecti, pilosi, breviusculi, aut mediocriter longi; articulus 1us brevis; 3us minutus, conicus, acutus. Pedes validi; tibiæ posticæ calcaribus duobus apicalibus sat longis. Alæ latæ; anticæ apud costam rectæ aut subconvexæ, apice plerumque angulatæ, raro falcatæ. *Mas.*—Antennæ sat late aut latissime pectinatæ. Alæ posticæ abdomen nonnunquam superantes. *Fœm.*—Antennæ subpectinatæ aut simplices. Abdomen alas posticas nonnunquam superans.

Male and fem. Body moderately stout, rather slender in the male of several species, stout in the female of *D. adusta*. Proboscis obsolete? Palpi porrect, pilose, rather short, or moderately long; first joint short; third minute, conical, acute. Legs stout; hind tibiæ with two moderately long apical spurs. Wings broad. Fore wings straight, or slightly convex along the costa, generally more or less angular, rarely falcate at the tips. *Male.*—Antennæ moderately or deeply pectinated. Abdomen extending as far as the hind wings, or shorter. *Female.*—Antennæ minutely pectinated, or simple. Abdomen extending as far as the hind wings or a little beyond.

This genus is variable in structure, and may be divided into several groups or subgenera.

Section I.

Mas et fœm. Corpus sat validum. Palpi sat longi et robusti, caput paullo superantes. Alæ anticæ apud costam rectæ, apice vix angulatæ. *Mas.*—Antennæ latissime pectinatæ, thorace multo longiores. Tibiæ anticæ dense pilosæ. Alæ posticæ abdomen non superantes. *Fœm.*—Antennæ subpectinatæ, thorace paullo longiores. Abdomen alas posticas paullo superans.

Body rather stout. Palpi moderately long and stout, extending rather beyond the head. Fore wings straight in front, hardly angular at the tips, very slightly oblique along the exterior border; interior angle much rounded; second inferior vein much further from the third than from the first; third much further from the fourth than from the second. *Male.*—Antennæ very deeply pectinated; much longer than the thorax. Abdomen extending as far as the hind wings. Fore tibiæ densely pilose. *Female.*—Antennæ very minutely pectinated, a little longer than the thorax. Abdomen extending a little beyond the hind wings.

1. DARALA OCELLATA.

Mas et fœm. *Pallide fusca capite thoraceque antice fulvis, aut cervina; palpi supra nigri; antennæ albæ ramis nigris; alæ anticæ maculis duabus discalibus subtus albo ocellatis fasciaque albida intus nigro ex parte marginatæ, guttisque exterioribus nigris fuscisque.*

Pale brown, fawn-colour beneath. Head and fore part of the thorax tawny. Antennæ white, with black branches. Palpi fawn-colour, mostly black on the outer side. Fore wings with two black spots in a line on the disk; beyond the middle a whitish slightly undulating band, which is partly bordered with black on the inner side; almost parallel to this band and rather nearer to it than to the exterior border there is a row of black dots, which are occasionally connected; wings paler beyond the latter, and generally with an indistinct row of brown dots; under side without the band, the spots generally with white disks. Hind wings with the row of dots more or less distinct; the spots hardly apparent above, but very distinct, and with white disks beneath. *Female.*—Wings with a cinereous tinge. Fore wings whitish along the costa, hoary along the exterior border; the spots with more or less distinct whitish disks. Hind wings generally hoary. Length of the body 7—11 lines; of the wings 18—34 lines.

a—f. Van Dieman's Land. Presented by R. Butler, Esq.
g—l. Van Dieman's Land. Presented by Morton Allport, Esq.

Var. β. Male and fem. Fawn-colour, excepting the spots and bands of the wings.

m, n. Sydney. Presented by E. Doubleday, Esq.
o. Van Dieman's Land. Presented by — Walcott, Esq.
p. New South Wales. From Mr. Milne's collection.
q. New Holland. From Mr. Cuming's collection.

Var. γ. Pale fawn-colour. Head, fore part of the thorax and fore wings along the costa white. Wings with two slender indistinct whitish slightly undulating discal bands. Fore wings with two white brown-bordered ocelli in a line on the disk, the inner one elongated, the outer one oblique. Hind wings with a brown spot above, and with two white brown-bordered ocelli beneath.

r. Van Dieman's Land. Presented by J. G. Children, Esq.

2. Darala reducta.

Mas. *Fusca, subtus pallidior; antennæ ramis fulvis; alæ anticæ maculis duabus nigris discalibus luteo biguttatis, fasciisque duabus guttularibus nigris; posticæ macula discali nigra.*

Male. Brown, pale brown beneath. Antennæ with tawny branches. Fore wings with two black spots, one beyond the other in the disk, each containing two luteous dots; a row of dark brown dots beyond the second spot, and another row along the exterior border; under side with a single black spot. Hind wings paler than the fore wings, with a discal black spot. Length of the body 6 lines; of the wings 15 lines.

a. New Holland.

Section II.

Mas et fœm. Palpi mediocriter longi, caput paullo superantes. Alæ anticæ apud costam rectæ, apice angulatæ, apud marginem exteriorem vix undulosæ. *Mas.* — Corpus sat gracile. Antennæ mediocriter pectinatæ. Alæ posticæ abdomen superantes.

Male. Body rather slender. Palpi moderately long, extending rather beyond the head. Antennæ moderately pectinated. Abdomen extending to two-thirds of the breadth of the hind wings. Fore wings straight along the costa till near the tips, where they are hardly convex, forming a very slightly acute angle at the tips, slightly oblique and hardly undulating along the exterior border; interior angle much rounded; second inferior vein a little further from the third than from the first; third more than twice further from the fourth than from the second. Hind wings with the interior angle almost rectangular.

A. Alæ fascia lutea. - - - - - - acuta, *Walk.*
B. Alæ fascia flava. - - - - - excisa, *Walk.*
C. Alæ fascia flava alteraque nigra. - - - varia, *Walk.*
D. Alæ fascia rufescente.
  A. Alæ anticæ ocellis duabus albis.
    a. Alæ anticæ maculis rufescentibus. - conspersa, *Walk.*
    b. Alæ anticæ maculis nullis rufis. - - ferruginea, *Walk.*
  B. Alæ anticæ guttis discalibus rufescentibus. simplex, *Walk.*
E. Alæ fascia nigricante. - - - - - plana, *Walk.*
F. Alæ fascia nulla. - - - - - - parva, *Walk.*

3. Darala acuta.

Mas. *Pallide cervina; caput antice palpique rufescentia; antennæ testaceæ; pectus flavum, antice rufescens; pedes rufo pilosi; alæ fascia lutea gracili obliqua guttis fuscis extus marginata, antice costa maculaque parva discali rufescentibus necnon ocello exteriore discali testaceo rufo marginato; posticæ apud costam flavescentes, subtus guttis duabus discalibus rufescentibus.*

Male. Pale fawn-colour. Head in front and palpi reddish. Antennæ testaceous. Pectus yellow, reddish in front. Legs mostly clothed with reddish hairs. Wings with a luteous slender oblique band, extending from three-fourths of the length of the costa of the fore wings to half the length of the interior border of the hind wings, accompanied on the outer side by a row of brown dots; fringe reddish. Fore wings reddish along the costa, and with two small reddish discal spots, the disk of the outer and larger one testaceous. Hind wings yellowish along the costa; under side with two reddish discal dots. Length of the body 6—7 lines; of the wings 18—22 lines.

a, *b*. New Holland. Presented by the Entomological Club.
c. New Holland. From Mr. Hunter's collection.

4. Darala excisa.

Mas. *Luteo-flava; caput anticum ex parte rufum; palpi tibiæ tarsique rufa; alæ fascia pallide flava guttisque fuscis, anticæ ocellis duobus discalibus parvis albis nigro marginatis maculisque duabus exterioribus rufis; posticæ guttis duabus nigris discalibus.*

This may be a variety of *D. acuta*.

Male. Luteous-yellow. Head partly red in front. Palpi, tibiæ and tarsi red. Wings with a pale yellow band and brown dots like those of *D. acuta*. Fore wings with two small white blackish-bordered discal ocelli, and with two red spots near the fore part of the exterior border, which has a red fringe at its junction with the costa. Hind wings with two black discal dots, which are most apparent beneath; a reddish mark near the tip of the interior border. Length of the body 6 lines; of the wings 16 lines.

a. Sydney. Presented by E. Doubleday, Esq.

5. Darala ferruginea.

Mas. *Fulva, aut rufescens, aut cervina, aut lutea; palpi tibiæ tarsique nigricantia; antennæ flavæ, ramis fuscis; genua albo maculata; alæ fascia obliqua gracili rufescente extus testaceo guttisque nigris marginata; anticæ ocellis duobus parvis albis nigro aut rufo marginatis.*

Male. Tawny. Palpi, tibiæ and tarsi blackish, partly clothed with whitish hairs. Antennæ yellow, with brown branches. Legs with a white spot on each knee. Wings with a reddish slender oblique band, which extends from two-thirds of the length of the costa to half the length of the interior border, and has a testaceous border on the outer side; it is accompanied by a row of black dots, which are nearly equally distant from it and from the exterior border; fringe reddish. Fore wings with two small white black-bordered ocelli. Length of the body 6—7 lines; of the wings 15—18 lines.

Var. β. Thorax partly reddish. Wings reddish.

Var. γ. Fawn-colour. Wings with reddish borders. Discal ocelli bordered with red; dots red.

Var. δ. Luteous; otherwise like *var.* α.

Var. ε like *var.* γ. Wings not bordered with red.

Fœm. *Cervina; antennæ luteæ; alæ anticæ ocellis duobus discalibus albis nigro marginatis, fasciisque tribus rufescentibus nigro ex parte marginatis*

Fawn-colour. Antennæ luteous. Fore wings with two white black-bordered discal ocelli, and with two reddish bands, the inner one on the inner side, and the outer on the outer side bordered with brown. Hind wings with bands much like those of the fore wings, and with two black discal dots. Length of the body 7 lines; of the wings 22 lines.

a—*e*. Van Dieman's Land. Presented by R. Butler, Esq.
f—*i*. Van Dieman's Land. Presented by Morton Allport, Esq.
j. Van Dieman's Land. Presented by J. G. Children, Esq.
k, *l*. Van Dieman's Land. From Mr. A. J. Smith's collection.

6. Darala varia.

Mas. *Testacea; caput antice nigricans; palpi pedesque nigra; antennæ flavæ; alæ fascia una duplicata angulosa nigricante, alteraque flava gracili obliqua guttis nigris extus marginata, maculis duabus discalibus nigris.*

Male. Testaceous. Head blackish in front. Palpi and legs mostly black. Antennæ yellow. Wings with a double zigzag blackish band at one-third of the length, and with a slender oblique yellow band beyond the middle; the latter is accompanied on its outer side by a row of black dots, and by a blackish patch on the interior border; fringe yellow; two black discal spots. Yellow band of the fore wings bordered with black on the inner side towards the interior border, where the dots on its outer side are connected by a black undulating line. Hind wings with the yellow band wholly bordered with black on the inner side; all the dots connected; discal spots not apparent on the upper side. Length of the body 9 lines; of the wings 28 lines.

a. New Holland. Presented by H. G. Harrington, Esq.
b. New Holland. From Mr. Stevens' collection.

7. Darala conspersa.

Pallide lutea; caput fascia rufescente; palpi et pedes rufi; genua posteriora albo guttata; alæ fascia obliqua media necnon maculis guttisque variis rufescentibus, anticæ ocellis duobus discalibus parvis albidis rufo marginatis.

Pale luteous. Head with a reddish band. Palpi and legs red. Posterior knees with a white dot. Wings with a reddish oblique middle band, and with various reddish spots and dots. Fore wings with two small whitish reddish-bordered discal ocelli. Hind wings with the middle band accompanied on the outer side by a yellow band, which partly appears on the fore wings. Length of the body 7 lines; of the wings 18 lines.

a. ——— ?

8. Darala simplex.

Mas. *Testacea; caput et pectus antice palpique rufa; antennæ flavæ; alæ fascia gracili obliqua media, guttisque discalibus rufescentibus, antice ad costam rufescentibus, postica extus subrufescentes.*

Male. Testaceous. Front of the head, palpi and fore part of the pectus red. Antennæ yellow. Wings with a slender oblique reddish middle band, and two reddish discal dots. Fore wings with some reddish marks along the costa. Hind wings with a slight reddish tinge beyond the middle band. Length of the body 7 lines; of the wings 16 lines.

a. ——— ?

9. Darala plana.

Fœm. *Testacea; capitis latera, pectus antice et femora antica rufescentia; alæ fascia gracili media obliqua guttisque exterioribus nigricantibus.*

Female. Testaceous. Sides of the head, fore part of the pectus and fore femora reddish. Wings with a slender oblique blackish middle band, which is accompanied on the outer side by an indistinct row of blackish dots; some blackish marks between the latter and the exterior border. Length of the body 6½ lines; of the wings 17 lines.

This may be a variety of *simplex*, which it much resembles, but has apparently no discal spots.

a. New Holland. Presented by His Excellency Capt. Grey.

10. Darala parva.

Mas. *Rufo-cervina; antennæ albido-testaceæ, ramis fuscis; alæ subtus et anticæ supra macula parva discali nigricante.*

Var. *β. Alæ vitta guttulari maculisque discalibus nigris.*

Male. Reddish fawn-colour. Antennæ whitish testaceous, with brown branches. Wings beneath and fore wings above with a small discal blackish spot. Length of the body 5—6 lines; of the wings 12—14 lines.

Var. β. Wings with a discal band of black dots. Fore wings with some discal black dots. Hind wings with a single black spot.

a. Van Dieman's Land. Presented by Morton Allport, Esq.

The following sections mostly agree with the second in the characters which are not noticed.

Section III.

Mas. Corpus sat gracile. Antennæ late pectinatæ. Alæ anticæ apud costam vix convexæ, apice subangulatæ; posticæ abdomen paullo superantes.

Male. Body rather slender. Antennæ deeply pectinated. Abdomen extending to three-fourths of the length of the hind wings. Fore wings hardly convex along the costa, forming a slightly rounded right angle at the tips, straight and very slightly oblique along the exterior border.

11. Darala Elizabetha.

Mas. *Pallide cervina; caput antice, palpi pectus et pedes rufescentia; antennæ albæ ramis fuscis; abdomen supra testaceum, subtus rufescens; alæ anticæ vix rufescentes, fascia obliqua exteriore e guttis quatuor fuscis, subtus posticæque rufescentes.*

Odenestis Elizabetha, *White, Append. Capt. Grey's Journ. Exped. Discov. Austral.* 478.

Male. Pale fawn-colour. Head in front, palpi, pectus and legs reddish. Antennæ white, with brown branches. Abdomen testaceous above, reddish beneath. Fore wings with a slight reddish tinge; an oblique band of brown dots at three-fourths of the length; under side and hind wings reddish. Length of the body 8 lines; of the wings 18 lines.

a, *b*. King George's Sound. Presented by His Excellency Capt. Grey.

Section IV.

Alæ anticæ apud costam vix convexæ, apice angulum fere rectum fingentes; posticæ abdomen perpaullo superantes.

Male. Abdomen extending to five-sixths of the breadth of the hind wings. Fore wings very slightly convex along the costa, forming an almost right angle at the tips, almost straight and slightly oblique along the exterior border; interior angle obtuse and rounded.

12. Darala integra.

Mas. *Lutea; caput, tibiæ et tarsi albida; palpi albidi, supra lutei; antennæ albidæ, ramis testaceis; tibiæ anticæ intus rufescentes; alæ fascia obliqua gracili recta rufa, subtus ocellis duobus discalibus parvis albis nigro marginatis guttisque exterioribus nigris, anticæ ad costam rufescentes, posticæ pallidiores apud costam flavæ.*

Male. Luteous. Head, tibiæ and tarsi whitish. Palpi whitish, luteous above. Antennæ whitish, with testaceous branches. Fore tibiæ reddish on the inner side. Wings with a slender straight oblique red band, which extends from two-thirds of the length of the costa of the fore wings to half the length of the interior border of the hind wings; under side with two small white discal black-bordered ocelli, and with an indistinct row of black dots

beyond the band. Fore wings reddish along the costa. Hind wings rather paler than the fore wings, yellow towards the costa. Length of the body 9 lines; of the wings 18 lines

a. New Holland. From Mr. Stevens' collection.

Section V.

Mas et fœm. Alæ anticæ apud costam vix convexæ, apice acute angulatæ, falcatæ, aut subfalcatæ; posticæ abdomen paullo superantes.

Male and female. Abdomen extending to three-fourths of the breadth of the hind wings. Fore wings hardly convex along the exterior border, acutely angular and falcate or subfalcate at the tips, slightly oblique and undulating along the exterior border.

13. DARALA SUBFALCATA.

Mas. *Pallide cervina; palpi supra nigricantes; antennæ auratoflavæ, ramis testaceis; abdomen supra fulvum; alæ fascia obliqua gracili rufa; guttisque exterioribus rufis, necnon fascia basali rufescente, anticæ ocellis duobus parvis albidis rufo marginatis, posticæ guttis duabus discalibus nigris.*

Male. Pale fawn-colour. Palpi blackish above. Antennæ gilded yellow, with testaceous branches. Abdomen tawny above, except towards the base. Wings with an oblique slender red band, which extends from two-thirds of the length of the costa of the fore wings to half the length of the interior border of the hind wings, and with an outer row of red dots; a much interrupted reddish band near the base of each wing. Fore wings with two small whitish red-bordered ocelli, and with a red mark near the fore end of the exterior border. Hind wings with two black dots corresponding to the ocelli of the fore wings, and with a red streak along the apical part of the interior border. Length of the body 7 lines; of the wings 21 lines.

a. Van Dieman's Land. Presented by R. Butler, Esq.

Fœm. *Cana, vix rufescens; antennæ flavi; femora antica rufescentia; alæ fascia obliqua gracillima rufescente guttis nigris extus marginata, anticæ ad costam rufo notatæ, maculis duabus parvis discalibus nigro marginatis.*

Fem. Hoary, with a very slight reddish tinge. Antennæ yellow. Fore femora reddish. Wings with a very slender oblique

reddish band, which is accompanied along its outer side by a row of blackish dots. Fore wings with some reddish marks along the costa, and with two small white blackish-bordered discal spots. Length of the body 6—7 lines; of the wings 22 lines.

Var. β. Wings with some black dots, and with an interrupted tawny band before the middle; outer band tawny, double.

Var. γ like *var.* β. Wings rather darker; inner band more distinct; a double row of blackish dots.

b. New Holland. From Mr. Stevens' collection.
c. New South Wales. From Mr. Wood's collection.
d. New Holland. From Mr. Milne's collection.

14. Darala falcata.

Fœm. *Pallide cervina, canescens; alæ anticæ falcatæ, ocellis duabus discalibus albis nigro marginatis, fasciaque recta obliqua rufescente intus determinata extus diffusa.*

Fem. Pale fawn-colour, with a somewhat hoary tinge. Fore wings falcate, with two white black-bordered discal dots, one in front of the other; a small blackish spot between them; a straight reddish band extending from near the tip of the costa to beyond the middle of the interior border; this band is darker and clearly defined on its inner side, paler and indefinite on its outer side, and extends also across the hind wings; on the under side it is broader and contains some whitish marks; a short broad reddish stripe along the fore part of the exterior border. Length of the body 12 lines; of the wings 36 lines.

New Holland? In Mr. Saunders' collection.

15. Darala hamata.

Fœm. *Pallide cervina; alæ fascia lata obliqua guttata fuscescente intus obscuriore fulvoque lineata extus undulosa; anticæ falcatæ, fascia interiore angulosa maculaque discali fuscis.*

Fem. Pale fawn-colour. Antennæ whitish. Wings with a broad brownish oblique band, extending from four-fifths of the length of the costa of the fore wings to the middle of the interior border of the hind wings, and containing a row of pale dots; its inner side is bounded by a slender dark brown band, which has a tawny outer border; its outer side is undulating. Fore wings falcate, with a rather broad zigzag pale brownish band, with darker

borders, at one-third of the length; this band is just visible on the hind wings; a small brown discal spot. Length of the body 13 lines; of the wings 39 lines.

a. Sydney. Presented by G. R. Waterhouse, Esq.

Section VI.

Mas. Corpus sat validum. Antennæ late pectinatæ, thorace valde longiores. Alæ anticæ apud costam vix convexæ, apice subangulatæ; posticæ abdomen paullo superantes. *Fœm.*—Corpus crassum. Antennæ subpectinatæ. Alæ anticæ apud costam subconvexæ; posticæ abdomen non superantes.

Male. Body moderately stout. Antennæ deeply pectinated, very much longer than the thorax. Abdomen extending to three-fourths of the breadth of the hind wings. Fore wings very slightly convex along the costa, forming an almost right and somewhat rounded angle at the tips, straight and slightly oblique along the exterior border. *Fem.*—Body stout. Antennæ minutely pectinated. Abdomen extending as far as the hind wings. Fore wings slightly convex in front, almost rectangular at the tips, very slightly convex, and not undulating along the exterior border.

16. Darala repleta.

Mas. *Ferrugineo-fusca; palpi subtus rufi; antennæ albido-testaceæ ramis fulvis; tarsi rufescentes; alæ fasciis duabus attenuatis obliquis lunulatis testaceis extus ex parte nigro marginatis, exteriore intus guttis nigris marginato, anticæ ocellis duobus parvis discalibus albis nigro marginatis; posticæ basi rufescentes.*

Male. Ferruginous-brown. Palpi bright red beneath. Antennæ whitish testaceous, with tawny branches. Tarsi reddish. Wings with two slender oblique scalloped testaceous bands, which are partly bordered with black; the outer one is accompanied on the inner side by a row of black dots; an irregular black band near the base. Fore wings with two small white black-bordered discal ocelli, and two testaceous marks between the inner ocellus and the base of the wing. Hind wings reddish towards the base. Length of the body 7 lines; of the wings 20 lines.

Fœm. *Alarum fasciæ totæ nigricantes, guttæ nigræ vix distinctæ, fascia basalis obsoleta; alæ anticæ ocellis majoribus, posticæ basi non præsertim rufescentes.*

Fem. Like the male. Bands of the wings wholly blackish; black dots less distinct; no band near the base. Fore wings with larger ocelli. Hind wings not more reddish towards the base than elsewhere. Length of the body 10—12 lines; of the wings 26—30 lines.

Var. β. Tawny. Bands of the wings broader and more distinct; discal ocelli larger.

a—c. Van Diemon's Land. Presented by R. Butler, Esq.
d—e. Van Dieman's Land. Presented by Morton Allport, Esq.
f. New Holland. Presented by Major-Gen. Hardwicke.

17. Darala adusta.

Mas. *Ferruginea-fusca; caput antice nigrum; palpi et pedes ex parte nigri; alæ fascii tribus nigricantibus, anticæ ocellis duobus discalibus albis nigro marginatis, posticæ ad costam rufescentes.*

Male. Ferruginous-brown. Head black in front. Palpi and legs partly black. Antennæ black, with tawny branches. Wings paler towards the exterior border, with three blackish bands; first band angular, near the base; second and third undulating or scalloped; second with a pale luteous border along its outer side; third double. Fore wings with two white black-bordered discal ocelli, which are largest and brightest on the under side. Hind wings with a reddish tinge towards the costa; the ocelli apparent on the under side. Length of the body 11 lines; of the wings 32 lines.

a, b. Van Dieman's Land. Presented by R. Butler, Esq.
c. Van Dieman's Land. Presented by J. G. Children, Esq.
d—f. Van Dieman's Land. Presented by Morton Allport, Esq.

Fœm. *Cervina; palpi ex parte nigricantes; antennæ testaceæ; alæ fasciis tribus nigricantibus, anticæ ocellis duobus discalibus cervinis nigro marginatis.*

Bombyx Nicothoë? *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 226, 10.

Alæ quatuor cinereæ postice cinnamomeæ linea communi serieque punctorum fuscis; anticæ strigis obsoletis mediis puncto lunulaque fuscis.

Fem. Fawn-colour. Palpi partly blackish. Antennæ testaceous. Wings with three blackish bands; first curved, near the base, indistinct on the hind wings; second scalloped, with a tawny

border along its outer side; third scalloped, very slender, with blackish dots at intervals. Fore wings with two pale fawn-coloured blackish-bordered discal ocelli. Hind wings with the ocelli apparent on the under side. Length of the body 10—15 lines; of the wings 26—42 lines.

Var. β. Discal ocelli whitish.

Var. γ. Wings cinereous fawn-colour; second and third bands bordered with paler fawn-colour along their outer side.

a—d. Van Dieman's Land. Presented by R. Butler, Esq.
e. Van Dieman's Land. From Mr. Dring's collection.
f—m. Van Dieman's Land. Presented by Morton Allport, Esq.
n. Van Dieman's Land. Presented by the Rev. Augustus Beaufort.
o, p. Swan River. Presented by Sir J. Richardson.

18. Darala connexa.

Fœm. *Obscure cervina; alæ fasciis tribus obliquis nigris, anticæ ocellis duabus albis nigro marginatis lineato connexis.*

Fem. Dark fawn-colour. Wings with three black oblique bands; the second one narrower than the first, and macular, less distinct on the hind wings; third submarginal, broader than the first. Fore wings with two white black-bordered discal ocelli, one beyond the other, connected by two black lines. Length of the body 8 lines; of the wings 24 lines.

a. Van Dieman's Land. Presented by R. Butler, Esq.

Section VII.

Mas. Antennæ late pectinatæ. Alæ anticæ apud costam vix convexæ, apice subangulatæ; posticæ abdomen paullo superantes.

Antennæ deeply pectinated. Abdomen extending to full three-fourths of the breadth of the hind wings. Fore wings very slightly convex along the costa, rounded and forming an almost right angle at the tips, straight and slightly oblique along the exterior border.

19. Darala fervens.

Mas. *Ferruginea, subtus lutea; pedes albido pilosi; alæ anticæ fusco-luteæ fasciis tribus obscure fuscis, 3a intus guttis fuscis marginata, ocellisque duobus discalibus albis nigro marginatis; posticæ luteæ fasciis fuscis, ocellis supra nigris.*

Male. Ferruginous, luteous beneath. Legs mostly clothed with whitish hairs. Wings mostly luteous beneath. Fore wings brown-luteous, with three dark brown bands; first near the base, undulating; second beyond the middle, straight, oblique; third very broad, marginal, dentate on its inner side, along which there is a row of brown dots; two white black-bordered ocelli on the disk. Hind wings luteous, with bands like those of the fore wings; ocelli wholly black on the upper side. Length of the body 8—8½ lines; of the wings 23—24 lines.

a, *b*. Van Dieman's Land. Presented by R. Butler, Esq.
c, *d*. Van Dieman's Land. Presented by Morton Allport, Esq.

Section VIII.

Mas. Palpi breves, caput non superantes. Alæ anticæ apice subangulatæ; posticæ abdomen longe superantes.

Male. Palpi short, not extending beyond the head. Abdomen extending to a little beyond half the breadth of the hind wings. Fore wings forming a somewhat rounded and almost right angle at the tip, straight and oblique along the exterior border; second inferior vein nearly twice further from the third than from the first; third a little further from the fourth than from the second.

20. Darala postica.

Mas. *Ferrugineo-fusca, subtus lutea; caput antice et palpi subtus testacea; alæ anticæ ocellis duobus parvis discalibus albidis nigro marginatis fasciisque tribus obliquis fuscis, posticæ apud costam luteæ.*

Male. Ferruginous-brown, luteous beneath. Head in front and palpi beneath testaceous. Fore wings with two small whitish black-bordered discal ocelli, and with three oblique brown bands; first band across the first ocellus; second beyond the second ocellus; third zigzag, double, submarginal. Hind wings luteous in front, like the fore wings, but with the first band and the outer part of the third one indistinct; two black dots instead of the ocelli. Length of the body 6 lines; of the wings 21 lines.

a. New Holland. From Mr. Stevens' collection.

Section IX.

Fœm. Corpus sat crassum. Antennæ thorace multo longiores. Alæ longiusculæ, sat latæ; anticæ apud costam subconvexæ, apice angulatæ; posticæ abdomen paullo superantes.

Fem. Body moderately stout. Antennæ very much longer than the thorax. Abdomen extending to three-fourths of the breadth of the hind wings. Wings rather long, moderately broad. Fore wings very slightly convex along the costa, hardly acutely angular at the tips, straight and rather oblique along the exterior border; interior angle very obtuse and rounded.

21. Darala cinerascens.

Fœm. *Rufo-cinerea; antennæ testaceæ; alæ fasciis tribus vix distinctis nigricantibus, anticæ ocellis duobus parvis albis nigro marginatis.*

Var. β. *Cinereo-cervina; alæ fascia sat lata rufescente guttisque exterioribus nigricantibus; anticæ ocello discali albido nigro-cincte.*

Fem. Reddish cinereous. Antennæ testaceous. Wings with three indistinct blackish bands; first band curved, before the middle; second and third oblique, scalloped, beyond the middle. Fore wings with two small white blackish-bordered ocelli. Length of the body 8 lines; of the wings 24 lines.

Var. β. Cinereous fawn-colour. Wings with a rather broad reddish band, and with an exterior row of blackish dots. Fore wings with a small whitish black-bordered discal ocellus.

a. Van Dieman's Land. Presented by R. Butler, Esq.
b. Van Dieman's Land. Presented by Morton Allport, Esq.

Section X.

Mas. Corpus sat robustum. Antennæ mediocriter pectinatæ, thorace paullo longiores. Alæ anticæ apud costam subconvexæ, apice angulatæ; posticæ abdomen paullo superantes.

Male. Body moderately stout. Antennæ moderately pectinated, a little longer than the thorax. Abdomen extending to full three-fourths of the breadth of the hind wings. Fore wings slightly convex in front, rectangular at the tips, slightly oblique and hardly undulating along the exterior border; interior angle obtuse, slightly rounded.

22. Darala canescens.

Mas. *Cana, nitens; antennæ testaceæ; alæ fascia media gracili recta obliqua cinerascente guttis concoloribus extus marginata, anticæ ocellis duobus parvis nigris rufo-cinctis, posticæ striga submarginali rufescente.*

Male. Hoary, shining. Antennæ testaceous. Wings with a slender straight oblique grayish middle band, which is accompanied on its outer side by a row of grayish dots. Fore wings with two small reddish ocelli, whose disks are blackish. Hind wings with a reddish streak towards the end of the interior border. Length of the body 9½ lines; of the wings 28 lines.

a. New Holland. From Mr. Stevens' collection.

Section XI.

Mas. Corpus sat robustum. Antennæ mediocriter pectinatæ, thorace paullo longiores. Alæ anticæ apud costam rectæ, apice subangulatæ; posticæ abdomen perpaullo superantes.

Male. Body moderately stout. Antennæ moderately pectinated, a little longer than the thorax. Abdomen reaching to nearly five-sixths of the breadth of the hind wings. Fore wings straight along the costa till near the tip, where they are very slightly convex, forming a slightly obtuse angle at the tip, oblique, and nearly straight along the exterior border; interior angle much rounded.

23. Darala inornata.

Mas. *Pallide flava; palpi pedesque anteriores ferruginei; alæ fascia guttulari nigra, anticæ maculis duabus parvis discalibus nigricantibus.*

Male. Pale yellow. Palpi ferruginous. Antennæ testaceous. Anterior legs mostly ferruginous. Wings with the usual band of black dots, which are indistinct and very minute. Fore wings with two small blackish discal spots. Length of the body 9½ lines; of the wings 28 lines.

a. Swan River. Presented by Sir J. Richardson.

Section XII.

Fœm. Corpus sat robustum. Antennæ subpectinatæ, thorace multo longiores. Alæ longiusculæ; anticæ apud costam subconvexæ, apice angulatæ; posticæ abdomen vix superantes.

Fem. Body moderately stout. Antennæ minutely pectinated, much longer than the thorax. Abdomen extending to about five-sixths of the breadth of the hind wings. Wings rather long. Fore wings slightly convex along the costa, rectangular at the tips, oblique and very slightly convex along the exterior border; interior angle obtuse, hardly rounded.

24. DARALA EXCELLENS.

Fœm. *Rufo-cervina; caput albidum, macula rufescente; pedes albidi, femoribus apice albo maculatis; alæ fascia obliqua ferruginea albido marginata, fasciisque duabus exterioribus angulosis rufescentibus nigro notatis; anticæ maculis marginalibus cinerascentibus ocellisque duabus parvis discalibus albidis cinereo marginatis.*

Fem. Reddish fawn-colour. Head whitish, with a pale reddish spot between the antennæ. Antennæ testaceous. Legs mostly whitish; a white spot at the tip of each femur. Wings luteous beyond the straight oblique ferruginous band, which extends from nearly four-fifths of the length of the costa of the fore wings to much beyond half the length of the interior border of the hind wings, and has whitish borders, which are obsolete in some parts on the outer side; between it and the exterior border there are two zigzag reddish bands, whose angles have blackish spots or dots. Fore wings with some grayish spots along the hinder part of the exterior border, and with two small whitish grayish-bordered discal ocelli. Length of the body 13 lines; of the wings 40 lines.

a. New Holland. From Mr. Stevens' collection.

NOTE.—The three following genera appear to connect the *Liparidæ* with the *Drepanulidæ* and the *Saturnidæ*.

Genus 62. DREATA.

Corpus sat gracile. Palpi porrecti; subvalidi caput vix superantes; articulus 1us brevis; 3us parvus, longiconicus. Pedes robusti; tibiæ posticæ calcaribus duobus sat longis. Alæ latæ, aut latissimæ; posticæ abdomen plus minusve superantes. *Mas.*—Antennæ late pectinatæ, thorace valde longiores. *Fœm.*—Antennæ subpectinatæ.

Body rather slender. Proboscis obsolete. Palpi porrect, moderately stout, with short hairs, extending very little beyond the head; first joint short; third small, elongate-conical. Abdomen not ex-

tending as far as the hind wings. Legs stout; femora and tibiæ pilose; hind tibiæ with two long apical spurs. Wings broad or very broad. Fore wings generally convex, nearly straight along the costa, almost rectangular at the tips, hardly convex, and very slightly oblique along the exterior border; interior angle much rounded; three inferior veins; second full thrice further from the third than from the first. *Male.*—Antennæ deeply pectinated, very much longer than the thorax. *Fem.*—Antennæ slightly pectinated.

A. Alæ murinæ. - - - - - - - - Hades, *Walk.*
B. Alæ fuscæ. - - - - - - - - edulis, *Boisd.*
C. Alæ ferrugineæ, cervinæ aut flavæ.
A. Alæ non fasciatæ. - - - - - concolor, *Walk.*
B. Alæ bifasciatæ.
a. Alæ fasciis fuscis.
a. Alæ anticæ costa subconvexa. - plumipes, *Walk.*
b. Alæ anticæ costa recta. - - - - degenera, *Walk.*
b. Alæ fasciis fulvis. - - - - - incerta, *Walk.*
c. Alæ fasciis ferrugineis. - - - mutans, *Walk.*
C. Alæ fasciis nonnullis. - - - imbecilis, *Walk.*
D. Alæ fasciis plurimis.
a. Thorax antice flavus. - - - - undifera, *Walk.*
b. Thorax antice non flavus. - - - undans, *Walk.*
D. Alæ citrinæ. - - - - - - - citrina, *Walk.*
E. Alæ *maris* testaceæ *fœm.* cervinæ. - - bipars, *Walk.*
F. Alæ *maris* flavæ, *fœm.* testaceæ.
A. Alæ ferrugineo fasciatæ. - - - - lineata, *Walk.*
B. Alæ fusco fasciatæ. - - - - geminata, *Walk.*

1. Dreata edulis.

Mas. *Fusca; alæ anticæ fasciis quatuor obliquis nigricantibus, 1a 2o et 3a duplicatis testaceo divisis; posticæ fasciis duabus.*

Bombyx edulis? *Boisd. Voy. Afr. et Austral.* 599.
Bombyx Boschmana, *Boisduval, MSS.*
Bombyx patula, *MSS.*

Male. Brown. Antennæ with black branches. Abdomen paler than the head and the thorax. Fore wings with four oblique blackish bands; first, second and third double, and with testaceous intervals; first angular; second irregular, the space between it and the third occupied by several parallel wavy slighter bands, which conform to the third band; fourth band single, with slight testaceous borders. Hind wings like the fore wings; first and second bands obsolete. Length of the body 17 lines; of the wings 44 lines.

a. Port Natal. From M. Gueinzius' collection.
b. South Africa. Presented by Dr. A. Smith.
c. Port Natal. From M. Becker's collection.
d, *e*. Cape. From M. Dregé's collection.
f. Port Natal. From Mr. Plant's collection.
g. ———?

2. Dreata undifera.

Palpi supra nigricantes; alæ fasciis plurimis nigricantibus. Mas. —*Cervina; thorax antice flavus.* Fœm.—*Ferruginea.*

Male. Fawn-colour. Palpi blackish above. Antennæ black, with tawny branches. Thorax yellow in front. Fore wings with very numerous undulating parallel blackish bands, beyond which there is a double nearly straight blackish band; a single undulating band beyond the latter.

Var. β. A blackish spot near the costa at one-third of the length of the wing, and another near the hind end of the exterior border. *Female.* — Ferruginous. Thorax not yellow in front. Bands of the wings like those of the male, but rather less numerous. Length of the body 11—14 lines; of the wings 38—44 lines.

a. North India. From Mr. Stevens' collection.
b. Himalaya Mountains. From Mr. Leadbeater's collection.
c. ———? From Mr. Children's collection.

3. Dreata mutans.

Mas. *Flava aut cervina; palpi supra ferruginei; antennæ testaceæ, ramis fuscis; pedes ferruginei, femoribus extus flavis; alæ fasciis duabus ferrugineis, 1a undulosa, 2a fere recta; posticæ venis fusco guttatis.*

Male. Yellow. Palpi ferruginous above. Antennæ testaceous; branches brown. Legs ferruginous; femora yellow on the outer side. Wings with two ferruginous bands; first band zigzag, at one-third of the length of the wing; second almost straight, beyond two-thirds of the length, accompanied by dots along the outer side and by some angular marks near the costa. Fore wings with some ferruginous marks along the costa, and with a spot near the interior angle. Hind wings with ferruginous dots along the veins. Length of the body 10—12 lines; of the wings 34—42 lines.

Var. β. Fawn-colour, with ferruginous bands.

a, *b*. North India. From Mr. Stevens' collection.
c. Philippine Isles. From Mr. Cuming's collection.

4. DREATA CITRINA.

Mas. *Citrina; caput, palpi et thorax anticus lutescentia; antennæ fulvæ.*

Male. Pale lemon-colour. Head, palpi and fore part of the thorax somewhat luteous. Antennæ tawny. Wings wholly of an unvaried colour. Length of the body 9 lines; of the wings 32 lines.

a. Central India. From Mr. Saunders' collection.

5. DREATA IMBECILIS.

Mas. *Pallide cervina; palpi supra fuscescentes; antennæ ramis fuscis; thoracis latera antica obscure fusca; alæ fasciis nonnullis subobsoletis undulosis fuscescentibus, unaque recta obscuriore exteriore, alteraque undulosa submarginali.*

Male. Pale fawn-colour. Palpi brownish above. Antennæ with brown branches. Thorax dark brown on each side in front. Wings with some indistinct undulating brownish bands, and with a straight, darker, and much more distinct exterior band; a single undulating band beyond the latter; a brown spot near the interior angle of each fore wing, and on the last mentioned band. Length of the body 11 lines; of the wings 34 lines.

a, b. North India. From Mr. James' collection.

6. DREATA INCERTA.

Mas. *Cervina; caput, palpi et thorax anticus fulvescentia; alæ fasciis duabus angulosis obliquis obscure fulvis.*

Male. Fawn-colour. Head, palpi and fore part of the thorax somewhat tawny. Antennæ with brownish branches. Wings with two dark tawny-zigzag oblique bands, the first at one-third of the length, the second at two-thirds of the length; these bands are most distinct on the fore wings. Length of the body 10 lines; of the wings 34 lines.

a. South Africa. Presented by Dr. A. Smith.

7. DREATA UNDANS.

Mas. *Pallide cervina; palpi fuscescentes; antennæ albido-testaceæ ramis fuscis; alæ fusco conspersæ fasciisque plurimis angulosis subobliquis fuscis.*

Male. Pale fawn-colour. Palpi brownish. Antennæ whitish testaceous, with brown branches. Wings minutely flecked with brown, and with very many zigzag slightly oblique brown bands,

which are most numerous and most distinct on the fore wings, and are mostly obsolete on the under side. Length of the body 8 lines; of the wings 26 lines.

a. Himalaya Mountains. From Mr. Leadbeater's collection.

8. Dreata degenera.

Mas. *Cervina; antennarum rami fusci, alæ fasciis duabus obliquis fuscis.*

Male. Fawn-colour. Antennæ with brown branches. Wings with two brown oblique bands, the first hardly before the middle of the wing, the second beyond two-thirds of the length. Length of the body 6—7 lines; of the wings 18—20 lines.

a—*c*. South Africa. Presented by Dr. A. Smith.

9. Dreata testacea.

Mas. *Testacea; alæ fasciis nonnullis angustis obliquis fuscescentibus.*

Var. β. *Alæ anticæ dimidio basali fuscescentes.*

Male. Testaceous. Wings with several slender oblique brownish bands; most of them pale brown and slightly undulating; two of them darker and more distinct, the interior one hardly undulating, the outer one straight; these bands are most distinct on the fore wings.

Var. β. Bands of the wings darker and more distinct. Fore wings brownish from near the base to much beyond half the length. Length of the body 9 lines; of the wings 28 lines.

a, *b*. Silhet. From Mr. Stainforth's collection.
c. Silhet. From Mr. Argent's collection.
d. Silhet. From Mr. Sowerby's collection.

Fœm.? *Obscure cervina; alæ fasciis fuscis.*

Fem.? Dark testaceous. Fore wings with five oblique brown bands; first band near the base of the wing; second before the middle; third indistinct, hardly beyond the middle; fourth at two-thirds of the length, darker and broader than the others; fifth slightly undulating, at half the distance between the fourth and the exterior border. Hind wings with three bands, which correspond to the second, fourth and fifth of the fore wings. Length of the body 12 lines; of the wings 32 lines.

Var. β. Wings with dark purplish brown bands. Fore wings mostly purplish brown, towards the base; third band broadest and most distinct.

a. ——? Presented by E. Doubleday, Esq.
b. Java. From Mr. Argent's collection.

10. DREATA PLUMIPES.

Mas. *Cervina; alæ anticæ fasciis quinque obliquis fuscis; 1a 2a 3aque indistinctis subundulosis, 4a 5aque obscurioribus; postica fascia unica.*

Male. Fawn-colour. Antennæ testaceous. Fore wings with five oblique brown bands; first, second and third indistinct and somewhat undulating; fourth and fifth darker, more distinct and more oblique; fourth more oblique than the fifth, which is slightly undulating and almost interrupted. Hind wings a little paler than the fore wings, with one indistinct brown band, which corresponds to the fifth band of the fore wings. Length of the body 9—10 lines; of the wings 26—28 lines.

Var. β. Ferruginous.

a, *b*. Ceylon. Presented by R. Templeton, Esq.

11. DREATA LINEATA.

Fœm. *Testacea; capitis vertex, thorax antice et pedes anteriores fulva; antennæ fulvæ; alæ fascia gracillima perobliqua ferruginea.*

Fem. Testaceous. Vertex of the head, fore border of the thorax and anterior legs mostly tawny. Antennæ tawny. Wings with a very slender ferruginous band, which is very oblique on the fore wings, and more so on the hind wings. Length of the body 9 lines; of the wings 27 lines.

a. North India. From Mr. Stevens' collection.

12. DREATA GEMINATA.

Mas. *Flava; capitis vertex et thorax antice sublutei; alæ sape fascia gracillima perobliqua fusca, maculisque exterioribus fuscis.*

Male. Yellow. Vertex of the head and fore part of the thorax slightly luteous. Wings with a very slender and oblique brown band at beyond two-thirds of the length; this band is accompanied

by a few brown spots along its outer side. Length of the body 6—7 lines; of the wings 21—23 lines.

Var. β. Band almost obsolete; spots obsolete on the hind wings, fewer on the fore wings.

Fœm. *Testacea; thoracis margo anticus, pectus antice et pedes anteriores fusco-fulva; alæ fascia gracili perobliqua fusca, antice maculis exterioribus fuscis.*

Fem. Testaceous. Fore border of the thorax, fore part of the pectus and anterior legs mostly brownish tawny. Wings with a slender and very oblique brown band at three-fourths of the length. Fore wings very oblique along the exterior border, with two brown spots on the outer side of the band and not far from the interior border. Length of the body 7—8 lines; of the wings 24—32 lines.

a. Ceylon. Presented by R. Templeton, Esq.
b—d. Ceylon. From the Rev. J. Wenham's collection.

13. Dreata Hades.

Mas. *Obscure murina; alæ fasciis nonnullis obscurioribus undulosis, unaque recta exteriore alteraque undulosa submarginali nigricantibus nigroque notatis.*

Male. Dark mouse-colour. Wings with some slight undulating darker bands, which are most apparent on the fore wings, and with a more distinct straight exterior blackish band, which is marked at intervals with black spots; one undulating band nearer the exterior border, and also marked with black spots. Length of the body 10 lines; of the wings 30 lines.

a. Silhet. From Mr. Argent's collection.

14. Dreata concolor.

Mas. *Cervina; antennarum rami fuscescentes; alæ concolores, breviusculæ.*

Male. Fawn-colour. Antennæ with brownish branches. Abdomen and hind wings hardly paler than the fore wings. Wings very broad, rather short. Length of the body 12 lines; of the wings 30 lines.

Port Natal. In Mr. Saunders' collection.

Genus 63. JANA.

Corpus sat robustum. Palpi porrecti, validi, sat longi, subtus valde pilosi, caput non aut paullo superantes; articulus 1us brevis; 3us minimus, conicus. Antennæ thoracе multo longiores. Abdomen alas posticas non superans. Pedes robusti; femora tibiæque dense pilosa; tibiæ posticæ calcaribus quatuor longis. Alæ latæ. *Mas.*—Antennæ late-pectinatæ. Abdomen gracilius. *Fœm.*—Antennæ subpectinatæ. Abdomen magis robustum.

Jana, *Boisd.*; *Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 21.

Body rather stout. Proboscis obsolete. Palpi stout, very densely pilose beneath, not extending beyond the head; first joint short; third very minute. Antennæ rather longer than the thorax. Legs stout; femora and tibiæ densely pilose; hind tibiæ with four long spurs. Wings broad. Fore wings slightly convex in front, forming a slightly obtuse angle at the tips, oblique along the exterior border; interior angle much rounded; three inferior veins; second about twice further from the third than from the first. *Male.*—Antennæ deeply pectinated. Abdomen hardly stout, extending to about three-fourths of the breadth of the hind wings. *Female.*—Antennæ minutely pectinated. Abdomen stout, extending to about five-sixths of the breadth of the hind wings.

A. Alæ fuscæ.
  A. Caput flavum.
    a. Alæ anticæ macula nigra brevi. - Tantalus, *Boisd.*
    b. Alæ anticæ macula nigra elongata. - signifera, *Walk.*
  B. Caput non flavum. - - - - incandescens, *Walk.*
B. Alæ cervinæ aut ferrugineæ.
  A. Alæ posticæ non maculatæ.
    a. Alæ nigro fasciatæ. - - - - - Eurymas, *Boisd.*
    b. Alæ fusco fasciatæ. - - - - - gracilis, *Walk.*
  B. Alæ posticæ macula magna nigro-purpurea. Mariana, *White.*
C. Alæ testaceæ.
  A. Alæ lineis undulosis. - - - pallida, *Walk.*
  B. Alæ lineis rectis. - - - lineosa, *Walk.*
D. Alæ anticæ incarnato albidæ. - strigina, *Westw.*

1. Jana Eurymas.

Pallide cervina (mas), *aut purpureo-ferruginea* (fœm.), *subtus ferrugineo-cervina; caput thoraxque antice palpique nigra; alæ anticæ fasciis nonnullis (duabus guttularibus) nigris unaque cervina; posticæ fasciis duabus latissimis arcuatis nigris.*

Jana Eurymas, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 21, f. 98.

Sierra Leona.

Male. Pale fawn-colour; under side more ferruginous fawn-colour. Head in front and palpi blackish brown, the latter ferruginous beneath. Antennæ testaceous. Thorax black in front and at the base of each fore wing. Fore wings with two slight nearly upright blackish bands between the base and the black discal spot; which is intersected and of moderate size; beyond the latter there is an oblique and slightly undulating slender black band; then come two oblique rows of black dots, and contiguous to the second row there is a slender very pale fawn-coloured band, which is bordered with black and tawny on its outer side. Hind wings with two curved very broad black bands; the outer one scalloped on its outer side. Under side of the four wings with two slender blackish bands. *Female.*—Like the male, but the ground-colour purplish ferruginous; abdomen and under side more reddish. Inner row of dots on the fore wings connected by streaks with the more interior band. Length of the body 17—20 lines; of the wings 48—58 lines.

Var. β. *Male.* Fore wings without marks above, excepting the exterior band.

a, *b*. Port Natal. From M. Gueinzius' collection.
c, *d*. Zoolu Country. Presented by G. F. Angas, Esq.

2. Jana incandescens.

Fœm. *Fusca, subtus rufescens; vertex, palpi supra et thorax antice nigro-fusci; abdomen rufescens, subtus et apice saturate rufum; pedes rufi, tarsis nigris; alæ anticæ subcanescentes, fusco sexfasciatæ.*

Fem. Brown, reddish beneath. Vertex of the head, palpi above and fore part of the thorax blackish brown. Antennæ with black branches. Abdomen reddish, deeper red at the tip and beneath. Legs red; tarsi black. Fore wings with a slight hoary

tinge, with five straight hardly oblique darker brown bands, and with one exterior more indistinct undulating brown band. Hind wings rather paler than the fore wings; their bands fewer and more indistinct. Length of the body 20 lines; of the wings 68 lines.

a. ———?

3. Jana Mariana.

Fœm. *Cervina; alæ anticæ fasciis quatuor linearibus obliquis undulosis vix distinctis purpureo-fuscis; posticæ fasciis magis determinatis maculaque maxima basali purpurea.*

Bombyx Mariana, *White, Ann. and Mag. Nat. Hist.* xii. 264.

Fem. Fawn-colour. Fore wings with four slender oblique undulating rather indistinct purplish brown bands. Hind wings with nearly corresponding but rather broader and more distinct bands, and with a very large purplish black spot at the base. Length of the body 20 lines; of the wings 56 lines.

a. Congo. From Mr. Cranch's collection.

4. Jana signifera.

Fœm. *Fusca; caput flavum, antice nigro-fuscum; abdomen cervinum; alæ anticæ fasciis quatuor nigricantibus maculaque elongata discali nigra testaceo signata; posticæ cervinæ, nigricante trifasciatæ.*

Fem. Brown. Head yellow, blackish brown in front. Thorax blackish brown. Abdomen fawn-colour. Fore wings with four blackish bands; first and second slender; first before one-fourth of the length of the wings; second beyond the middle; third and fourth broad; third very near the fourth, which is marginal; a long black discal streak, including a transverse fawn-coloured mark. Hind wings fawn-coloured, with bands like those of the male, with the exception of the basal band, which is obsolete. Length of the body 17 lines; of the wings 50 lines.

q. North India. Presented by Dr. Wallich.

5. Jana Tantalus.

Mas. *Nigro-fusca; caput luteum, antice nigricans; antennæ testaceæ; abdomen fuscum; alæ anticæ apices versus pallidiores et cervino variæ maculaque nigra discali cervino notatæ; posticæ cervinæ fusco quadrifasciatæ.*

Jana Tantalus, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 21, f. 99, 100.

Male. Blackish brown, paler beneath. Head luteous, blackish in front. Antennæ testaceous. Abdomen brown. Fore wings rather paler and somewhat varied with fawn-colour for one-third of the length from the tips, and with a discal black spot, which includes a fawn-coloured transverse mark. Hind wings fawn-colour, with four curved brown bands; first and second bands slender; second undulating; third and fourth broad. Length of the body 12—15 lines; of the wings 34—40 lines.

a, *b*. Port Natal. From M. Gueinzius' collection.
c, *d*. South Africa. From Mr. Argent's collection.

6. Jana pallida.

Fœm. *Pallidissime cervina; alæ fasciis nonnullis linearibus undulosis cinereis unaque subrecta valde obliqua fulva; anticæ guttis duabus vitreis.*

Fem. Very pale fawn-colour. Wings with some irregular slender undulating gray bands, and with a nearly straight and very oblique tawny band, which is near the base. Fore wings with two small vitreous spots, the smaller one in front of the other. Length of the body 17—19 lines; of the wings 46—52 lines.

a. Silhet. Presented by E. Doubleday, Esq.
b. Sumatra. From Sir Stamford Raffles' collection.

7. Jana lineosa.

Mas et fœm. *Testacea; alæ anticæ fasciis quinque obliquis ferrugineis.*

Testaceous. Fore wings with five oblique ferruginous bands; first and second bands slightly converging hindward; second and third slightly diverging; third and fourth almost parallel, with two indistinct paler bands between them, the wing beyond the fourth band darker than elsewhere; fifth band slightly curved, converging towards the fourth. Hind wings with three paler bands, which correspond to the third, fourth and fifth of the fore wings. *Male.*—Antennæ deeply pectinated. Abdomen slender, extending to about five-sixths of the breadth of the hind wings. Length of the body 17—18 lines; of the wings 42—54 lines.

a—*c*. Silhet. From the Rev. J. Stainforth's collection.
d, *e*. Silhet. Presented by E. Doubleday, Esq.

8. JANA GRACILIS.

Mas. *Pallide cervina; antennæ testaceæ, ramis obscurioribus; alæ fusco ex parte nebulosæ fasciisque duabus fuscis; posticæ fascia exteriore undulosa testacea.*

Male. Pale fawn-colour. Antennæ testaceous, with darker branches. Wings partly clouded with pale brown. Wings with two oblique very slender nearly straight brown bands, which are most distinct on the fore wings. Hind wings with a testaceous undulating band between the outer brown band and the exterior border. Length of the body 14 lines; of the wings 40 lines.

a. Ashanti. From the Wesleyan Missionary Society's collection.
b. ———? From Mr. Milne's collection.

9. JANA? STRIGINA.

Alæ anticæ pallide incarnato albidæ, strigis quatuor fulvo castaneis; posticæ basi fuscæ strigis tribus transversis albis, pone medium fulvo castaneæ. Long. alar. 72 lin.

Lasiocampa strigina, *Westw. Proc. Zool. Soc. Lond.* (1849). Pt. xvii. 1, 37.

Sierra Leone.

Genus 64. CHALEPTERYX.

Corpus robustum, dense pilosum. Palpi porrecti. Antennæ thorace multo longiores. Pedes validi; femora dense lanuginosa; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ; anticæ apud medium latæ, apices versus angustæ. *Mas.*—Palpi validi, dense pilosi; articulus 1us breviusculus; 3us exiguus, conicus, acuminatus. Antennæ sat late pectinatæ. Alæ anticæ apud marginem exteriorem undulosæ; posticæ abdomen non superantes. *Fœm.* — Palpi sat graciles; articulus 3us elongatus, lanceolatus, 2i dimidio æqualis. Antennæ subpectinatæ. Alæ anticæ apud marginem exteriorem vix undulosæ; posticæ abdomen paullo superantes.

Chalepteryx, *G. R. Gray, Trans. Ent. Soc. Lond.* i. 122.
Saturnia, p., *Feisthamel.*

NOTE.—The above name having been given to this genus, that of *Megethna*, by which it is distinguished in the Synopsis, must be cancelled.

Male. Body stout, thickly pilose. Proboscis obsolete? Palpi porrect, stout, thickly pilose, extending some little distance beyond the head; first joint very short; third minute, conical, acuminated. Antennæ rather deeply pectinated, much longer than the thorax. Abdomen rather long, extending to the hind wings. Legs stout; femora densely lanuginose; fore tibiæ tufted beneath; hind tibiæ with four long spurs. Wings rather long. Fore wings rather broad across the middle, rather narrow towards the tips, hardly convex in front, almost rectangular at the tips, very oblique and slightly undulating along the exterior border; interior angle much rounded; second inferior vein not further from the third than from the first; third about four times further from the fourth than from the second. Hind wings broad, rounded at the tips, which are at some distance beyond the interior angle of the fore wings, very slightly undulating along the exterior border. *Female.*—Palpi rather slender; third joint elongate, lanceolate, about half the length of the second. Antennæ minutely pectinated. Abdomen extending nearly as far as the hind wings. Fore wings hardly undulating along the exterior border; second inferior vein much further from the third than from the first; third about thrice further from the fourth than from the second.

The only species of this genus much exceeds all the other *Liparidæ* in the expanse of its wings, and in their form and colouring, and in the hyaline spots of the fore pair it exhibits some resemblance to the *Saturnidæ*.

1. Chalepteryx Collesi.

Mas. *Alæ anticæ fusco-rufæ, lineis tribus nigris quarum ultima serrata fusco-cincta, medio puncto rufo, maculis duabus fenestratis ad apicem positis; posticæ valde fuscæ, striga in medio rosea, linea ad marginem undata fulva.* Fœm.—*Alæ quatuor murino-fuscæ, cum lineis punctoque* maris, *haud fulvis, sed albidis.*

Chalepteryx Collesi, *G. R. Gray, Trans. Ent. Soc. Lond.* i. 122.
Saturnia Laplacei, *Feisthamel, Voy. de la Favorite,* v. *Suppl.* 26, pl. 8, 9.

a, b. Sydney. Presented by Dr. Sinclair.
c. New South Wales. From Mr. Wood's collection.
d. Australia. From Mr. Stevens' collection.
e, f. Australia.

NOTE.—The three following genera recede very much from the typical form of *Liparidæ*, and have some resemblance to the *Psychidæ*.

Genus 65. COBORISA.

Mas. Corpus sat gracile. Proboscis capitis latitudine æqualis. Palpi porrecti, pilosi, mediocriter longi, caput paullo superantes; articulus 2us 1o valde longior; 3us minutus, obtusus. Antennæ subpectinatæ, corporis dimidio breviores. Abdomen alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus minutis apicalibus. Alæ longiusculæ, non latæ.

Male. Body rather slender. Proboscis about as long as the breadth of the head. Palpi porrect, pilose, moderately long, extending rather beyond the head; second joint very much longer than the first; third minute, obtuse. Antennæ minutely pectinated, less than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with minute apical spurs. Wings rather long, not broad. Fore wings triangular; second inferior vein about twice further from the third than from the first; third full eight times further from the fourth than from the second.

1. COBORISA FENESTRATA.

Mas. *Alba; caput fulvo fasciatum; palpi extus lutei, apice fusci; prothorax vitta dorsali marginibusque fuscis; mesothorax fusco bivittatus, testaceo bimaculatus; abdomen apice luteum; alæ nudæ, hyalinæ, marginibus cinereis aut albis.*

Male. White. Head with a curved tawny band on the front. Proboscis testaceous. Palpi luteous on the outer side; their tips brown. Prothorax with a brown stripe and brown borders. Mesothorax with two brown stripes, which diverge bindward, and with a testaceous spot on each side. Abdomen luteous at the tip. Wings bare, hyaline; fore wings gray or whitish along the borders; hind wings white along the borders. Length of the body 7 lines; of the wings 18 lines.

a—c. Mexico? Presented by E. Doubleday, Esq.

Genus 66. GYARA.

Mas. Corpus lineare, cylindricum, longiusculum, sat gracile. Proboscis brevissima. Palpi longiusculi, subascendentes; articulus 2us 1o brevior; 3us longiconicus, 2o multo brevior. Antennæ sat

late pectinatæ. Abdomen alas posticas superans. Pedes graciles; tibiæ posticæ calcaribus minutis apicalibus. Alæ longiusculæ, mediocriter latæ.

Male. Body linear, cylindrical, rather long and slender. Proboscis very short. Palpi rather long, slightly ascending; second joint shorter than the first; third elongate-conical, much shorter than the second. Antennæ rather deeply pectinated. Abdomen extending some little distance beyond the hind wings. Legs slender; hind tibiæ with minute apical spurs. Wings rather long, moderately broad. Fore wings straight in front; discal fold indistinct; first and second inferior veins nearly contiguous at the base; third much nearer to the second than to the fourth. Hind wings slightly convex in front; their veins like those of the fore wings in structure.

1. GYARA FENESTRATA.

Mas. *Alba; caput nigro bifasciatum; palpi nigri, albo bifasciati; antennæ nigræ; thorax vittis duabus antice connexis pallide luteis; abdomen supra albido testaceum; pedes fusco vittati; alæ limpidæ, albo marginatæ; anticæ costa lutea fusco marginata, striga marginali pallide lutea, venis fuscis; posticæ venis albis.*

Male. White. Head with a black band between the antennæ and another in front. Proboscis ferruginous. Palpi black, white at the base, and with two white bands. Antennæ black, white above. Thorax with two pale luteous stripes, which are connected by a band on the hind border of the prothorax. Abdomen whitish testaceous above. Legs with brown stripes. Wings limpid, with white borders; fore wings, with the costa, pale luteous, bordered behind with brown; an interrupted pale luteous streak along the outer border and the inner border; veins brown, white towards the base. Hind wings with white veins. Length of the body 6—9 lines; of the wings 18—27 lines.

a. Parà. From Mr. Johnson's collection.
b. Rio Janeiro. From Mr. Stevens' collection.

Genus 67. APISA.

Mas et fœm. Corpus longiusculum, sat validum. Palpi porrecti, longi, nudi, caput sat longe superantes; articulus 2us 1o multo longior; 3us lanceolatus, gracilis, 2i dimidio æqualis. Thorax pilis longis dense hirtus. Abdomen alas posticas dimidio

superans. Pedes validi; tibiæ anticæ subtus unidentatæ, posticæ calcaribus apicalibus minimis. Alæ longæ, angustæ; posticæ ad costam valde convexæ. *Mas.*—Antennæ latissime pectinatæ, thorace multo longiores. *Fœm.*—Antennæ simplices.

Male and fem. Body rather long and stout. Proboscis very short or none. Palpi porrect, long, bare, extending some distance beyond the head; second joint much longer than the first; third lanceolate, slender, about half the length of the second. Thorax thickly clothed with long hairs. Abdomen long, slightly tapering, extending for half its length beyond the hind wings. Legs stout, especially the fore pair; fore tibiæ armed beneath with a stout tooth; hind tibiæ with very minute apical spurs. Wings long and narrow. Fore wings full twice the length of the hind wings; fore border straight; discal fold almost obsolete; two superior veins; first and second inferior veins united at the base; third rather nearer to the second than to the fourth. Hind wings rather short, very convex in front, with three inferior veins. *Male.*—Antennæ very deeply pectinated, much longer than the thorax. *Female.*—Antennæ simple.

1. APISA CANESCENS.

Mas. *Albida; caput, palpi et pedes fusca; abdomen basi et subtus albidum.*

Male. Whitish. Body, palpi and legs brown. Antennæ with tawny branches. Abdomen whitish beneath and at the base. Legs partly clothed with whitish hairs. Length of the body 7—11 lines; of the wings 18—26 lines.

a—d. South Africa. From Mr. Argent's collection.

ADDENDA TO THE LIPARIDÆ.

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ANTHORA FUSCA.

Mas. *Fusco-viridis; palpi nigro varii; antennæ nigræ; pedes fusci, femoribus albidis, tibiis tarsisque albido fasciatis; alæ anticæ nigro conspersæ, fasciis nonnullis indistinctis angulatis obliquis fuscis ex parte albido marginatis, ocello fusco discali subquadrato, arcubusque submarginalibus fuscis; posticæ pallide fuscæ, albido sordido variæ.*

Male. Brownish green, pale brownish beneath. Palpi partly black above. Antennæ black. Abdomen and legs pale brown. Tibiæ and tarsi with whitish bands. Fore wings sprinkled with black, and with some indistinct oblique angular brown bands which have whitish borders; a subquadrate brown discal ocellus, and a row of little submarginal brown lunate marks. Hind wings pale brown, with indistinct dingy whitish bands. Length of the body 7—8 lines; of the wings 16—18 lines.

a—e. South Africa. Presented by Dr. A. Smith.

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ANAXILA SUBFLAVA.

Mas. *Albida; caput supra et palpi lutea; pedes nigro varii; tarsi lutescentes; alæ anticæ marginibus fusco variis guttisque apud marginem exteriorem nigris, subtus posticæque totæ pallide luteæ.*

Male. Whitish. Head above and palpi luteous. Legs varied with black; tarsi mostly luteous. Fore wings brown along the exterior border, and with brown marks along the costa and along the

interior border, and with a row of black dots on the exterior border; under side and hind wings pale luteous. Length of the body 5 lines; of the wings 13 lines.

a. Ashanti. From the Wesleyan Missionary Society's collection.

ANAXILA NOTATA.

Fœm. *Albido-cervina; palpi gracilis, caput sat longe superantes; articulus 3us longiconicus, acuminatus; antennæ subpectinatæ; alæ fusco conspersæ, anticæ ocello discali incompleto fusco-cervino fasciisque duabus fuscescentibus; posticæ macula discali fasciaque fuscis.*

Female. Whitish fawn-colour. Palpi slender, extending some distance beyond the head; third joint elongate-conical, acuminated. Antennæ slightly pectinated. Wings flecked with brownish dots. Fore wings above with a very slender and imperfect brownish band near the base, and an angular more complete and broader one beyond the discal ocellus, which is imperfect and composed of brown and fawn-colour. Hind wings beneath with a brown discal spot and a brown band between the spot and the border. Length of the body 6 lines; of the wings 14 lines.

a. Ceylon. Presented by R. Templeton, Esq.

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2. PROTODECA ANGULIFERA.

Mas. *Albida; palpi, pedes et alæ anticæ pallide cervina; antennæ ramis fuscis; alæ anticæ fascia angulata e guttis septem nigris; posticæ apud margines pallide cervinæ.*

Whitish, Palpi, legs and fore wings pale fawn-colour. Antennæ with brown branches. Fore wings with seven black dots, forming an obtusely angular band. Hind wings pale fawn-colour along the exterior border. Length of the body 5 lines; of the wings 14 lines.

a. East Indies. From Archdeacon Clerk's collection.

Genus LOPERA.

In the Synopsis, page 780, this genus may be placed with *Poloma*, from which it is thus distinguished:—

* Alæ anticæ margine exteriore vix obliquo. - - POLOMA.
** Alæ anticæ margine exteriore sat obliquo. - LOPERA.

Corpus pilosum, sat validum. Palpi breves, pilosi, caput non superantes; articulus 3us minutus, conicus. Abdomen apice fasciculatum. Pedes sat graciles; femora et tibiæ pilis longis vestita; tibiæ posticæ calcaribus quatuor sat longis. Alæ latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo et subconvexo. *Mas.*—Antennæ late pectinatæ, thorace multo longiores. Alæ posticæ abdomen superantes. *Fœm.*—Antennæ subpectinatæ, thorace paullo longiores. Alæ posticæ abdomen non superantes.

Body moderately stout, pilose. Palpi short, pilose, not extending beyond the head; third joint minute, pilose. Abdomen tufted at the tip. Legs rather slender; femora and tibiæ clothed with long hairs; hind tibiæ with four moderately long spurs. Wings broad. Fore wings straight along the costa, rounded at the tips, oblique and slightly convex along the exterior border; interior angle rounded; first, second and third inferior veins contiguous at the base; fourth remote. *Male.*—Antennæ deeply pectinated, very much longer than the body. Abdomen not extending so far as the hind wings. *Female.*—Antennæ minutely pectinated. Abdomen extending as far as the hind wings.

1. LOPERA SQUAMOSA.

Lutea; antennæ testaceæ; alæ anticæ supra nigro conspersæ fasciisque duabus obliquis indeterminatis albido squamosis. Mas.—*Thorax, pectus, abdomen basi pedesque fusco-cana; alæ anticæ supra pallide cervinæ.*

Luteous. Antennæ testaceous. Fore wings above with numerous black flecks or scales, and with two oblique imperfect and incomplete bands composed of whitish scales. *Male.*—Thorax, pectus, base of the abdomen, and legs with brownish hoary hairs. Fore wings above pale fawn-colour, rather darker about the black flecks. Length of the body 6 lines; of the wings 16 lines.

a, b. South Africa. From Mr. Pamplin's collection.

Genus PEROLA.

In the Synopsis, page 780, this genus will stand with *Charnida*, from which it differs thus:—

§ Corpus sat validum. CHARNIDA.
§§ Corpus valde crassum. PEROLA.

Mas. Corpus robustum dense pilosum. Caput antice prominulum. Palpi sat validi, subascendentes, caput non superantes; articulus 1us brevissimus; 3us minutus, conicus. Antennæ sat late pectinatæ. Abdomen alas posticas non superans. Pedes validi, pilis longis dense vestiti; tibiæ posticæ calcaribus quatuor longis. Alæ latæ, dense vestitæ; anticæ apud costam rectæ, apice rotundatæ.

Male. Body stout, thickly pilose. Head rather prominent in front. Palpi rather stout, slightly ascending, not extending beyond the head; first joint very short; third minute, conical. Antennæ rather deeply pectinated. Abdomen not extending beyond the hind wings. Legs stout, thickly clothed with long hairs; hind tibiæ with four long spurs. Wings broad, thickly clothed. Fore wings straight in front, rounded at the tips, slightly oblique and nearly straight along the exterior border, which forms a continuous curve with the interior border; second inferior vein nearer to the first than to the third and fourth, which spring from a short common petiole; the fourth is joined near its tip to the fore branch of the submedian, which is forked.

1. PEROLA MURINA.

Mas. *Murina; antennæ nitentes; alæ anticæ subtus posticæque paullo pallidiores.*

Male. Mouse-colour. Antennæ, fore wings beneath and hind wings rather paler. Wings shining. Length of the body 9 lines; of the wings 25 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

Genus PANDALA.

§ Alæ posticæ abdomen non superantes. - REPENA, SARSINA.
§§ Alæ posticæ abdomen longe subtus superantes. PANDALA.

Mas. Corpus gracile. Palpi pilosi, sat validi, subascendentes, caput sat longe superantes; articulus 1us brevis; 3us conicus, minimus. Antennæ latissime pectinatæ, thorace multo longiores. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latæ; anticæ apud costam vix convexæ, vix angulosæ; posticæ abdomen longe superantes.

Male. Body slender. Palpi rather stout, pilose beneath, slightly ascending, extending some distance beyond the head; first

joint short; third conical, very minute. Antennæ very deeply pectinated, much longer than the thorax. Abdomen not extending near so far as the hind wings. Legs slender; hind tibiæ with four long spurs. Wings broad. Fore wings very slightly convex along the costa, slightly oblique and nearly straight along the exterior border; angle at the tips and interior angle somewhat rounded; three inferior veins; second about twice further from the third than from the first. Much resembles the *Geometrites*.

1. PANDALA DOLOSA.

Mas. *Fusca, subtus pallidior; alæ fasciis nonnullis obscurioribus angustis angulosis subobliquis.*

Male. Brown, paler beneath. Wings with several slender darker brown slightly oblique zigzag bands. Length of the body 7 lines; of the wings 19 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Genus ICTA.

This genus may be distinguished from *Berelade*, thus:—

* Alæ sat latæ. - - - - - - - - BERELADE.
** Alæ perangustæ. - - - - - - - - - ICTA.

Mas. Corpus sublineare, sat gracile. Caput magnum. Palpi brevissimi; articulus 3us minimus. Antennæ late pectinatæ, corporis dimidio longiores. Abdomen alas posticas superans. Pedes validi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ perangustæ; anticæ posticis valde longiores.

Male. Body moderately stout, nearly linear, Head large. Palpi very short; third very small. Antennæ deeply pectinated, more than half the length of the body. Abdomen extending beyond the hind wings. Legs stout; hind tibiæ with two minute apical spurs. Wings very narrow. Fore wings very much longer than the hind wings; first and second inferior veins contiguous at the base; fourth about four times further from the third than the third is from the second.

1. ICTA FULVICEPS.

Nigra; caput, thoraæ antice, abdomen apice pedesque testaceo-fulva; pedes postici supra nigri; alæ anticæ ad costam testaceæ.

Male. Black. Head, palpi, antennæ, fore part of the thorax, tip of the abdomen and legs testaceous tawny. Hind legs black above. Fore wings with a testaceous costa. Length of the body 4 lines; of the wings 11 lines.

a. New Holland. Presented by E. Doubleday, Esq.
b. New Holland. Presented by H. G. Harrington, Esq.

Genus PSEUDOMESA.

This genus differs from *Cispia* by the following character:—

‡ Alæ posticæ abdomen non longe superantes. - CISPIA.
‡‡ Alæ posticæ abdomen longe superantes. - PSEUDOMESIA.

Mas. Corpus gracile. Palpi pilosi, longiusculi, caput paullo superantes; articuli 1us et 2us sat longi; 3us minutus, conicus, acuminatus. Antennæ late pectinatæ, thorace longiores. Pedes gracillimi, fere nudi; tibiæ posticæ calcaribus quatuor longis. Alæ anticæ apud costam latæ, apice subacuminatæ, margine exteriore sat obliquo, angulo interiore obtuso bene determinato; posticæ latissimæ, abdomen longe superantes.

Male. Body slender. Palpi porrect, pilose, moderately long, extending beyond the head; first and second joints rather long; third minute, conical, acuminated. Antennæ deeply pectinated, longer than the thorax. Abdomen extending to rather beyond half the breadth of the hind wings. Legs very slender, almost bare: hind tibiæ with four long spurs. Fore wings broad, hardly convex along the costa, somewhat acuminated at the tips, rather oblique along the exterior border; interior angle obtuse, distinct; first, second and third inferior veins nearly contiguous at the base; fourth remote. Hind wings very broad.

1. PSEUDOMESA QUADRIPLAGIATA.

Mas. *Fusca; corpus subtus pedesque lutea; alæ anticæ fascia testacea, posticæ vitta testacea.*

Male. Brown. Body beneath and legs luteous. Fore wings with a testaceous straight oblique band, extending from half the length of the costa to the interior angle. Hind wings with a broad testaceous discal streak. Length of the body 6 lines; of the wings 18 lines.

a, b. Silhet. From Mr. Argent's collection.

Genus MOTADA.

This genus may be distinguished from the genera in page 780 by the following character:—

i. Antennæ *maris* latissime pectinatæ. JANA, &c.
ii. Antennæ *maris* breviter pectinatæ. MOTADA.

Mas. Corpus validum, dense pilosum. Palpi porrecti, sat validi, hirti, caput superantes; articulus 1us brevis; 3us elongatus, conicus. Antennæ breviter pectinatæ, thorace longiores. Abdomen alas posticas paullo superans. Pedes validi, hirti; tibiæ posticæ calcaribus quatuor sat parvis. Alæ latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore parum obliquo.

Male. Body stout, thickly pilose. Proboscis obsolete? Palpi porrect, rather stout, pilose, extending somewhat beyond the head; first joint short; third elongate-conical. Antennæ pectinated, longer than the thorax; branches rather short. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout, pilose; hind tibiæ with four rather short spurs. Wings broad. Fore wings straight along the costa, rounded at the tips, very slightly oblique and nearly straight along the exterior border; interior angle rounded; first and second inferior veins nearly contiguous at the base; third full thrice further from the fourth than from the second.

1. MOTADA LATERALIS.

Mas. *Fusca; antennarum rami testacei; abdominis latera luteo vittata; alæ anticæ supra posticæque subtus macula discali obscuriore, venis testaceis.*

Male. Brown. Antennæ with testaceous branches. Abdomen with a luteous stripe along each side. Fore wings with a darker brown spot at the tip of the discal areolet; veins testaceous. Hind wings with a darker discal spot beneath. Length of the body 7—7½ lines; of the wings 14—19 lines.

a. Brazil? Presented by E. Doubleday, Esq.
b, c. Rio Janeiro. From Mr. Stevens' collection.

Genus COSMETHIS.

Mas. Corpus sat validum. Palpi caput paullo superantes. Antennæ latissime pectinatæ, corporis dimidio longiores. Abdomen alas posticas non superans. Pedes sat validi. Alæ longiusculæ; anticæ apud costam convexæ, apice rotundatæ, margine exteriore valde obliquo.

Male. Body moderately stout. Palpi extending a little beyond the head. Antennæ very deeply pectinated, rather more than half the length of the body. Abdomen extending as far as the hind wings. Legs rather stout. Wings rather long, moderately broad. Fore wings convex along the costa, rounded at the tips, very oblique along the exterior border.

1. Cosmethis Barbara.

Mas. *Nigra; caput et abdomen flava, hoc fasciis luteis; thorax vittis tribus connexis luteis; alæ plaga magna discali alba; anticæ maculis nonnullis posticis luteis tribusque discalibus albis; posticæ maculis duabus albis.*

Phalæna-Bombyx Barbara, *Cram. Pap. Exot.* iv. 151, pl. 368, f. B.

Cosmethis Barbara, *Hübn. Verz. Schmett.* 179, 1853.

Male. Black. Head yellow. Thorax with three luteous stripes, which are connected in front and behind. Abdomen yellow, with a luteous band on each segment. Fore wings with a very large discal white spot, and with three small white spots, two of them towards the base, one near the tip; some luteous spots along the interior border from its base to two-thirds of its length. Hind wings like the fore wings, but with no luteous spots, and with only two small white spots.

Redoa? regina.

Argentea, micans; alæ oblique subfasciatæ.

Phalæna regina, *Cram. Pap. Exot.* iii. 142, pl. 272, f. A.

Silvery white, glittering. Wings with slight oblique bands.

Surinam.

Dreata Fabia.

Dreata mutans, *var.?*

Phalæna Fabia, *Cram. Pap. Exot.* iii. 98, pl. 250, f. B.

Coromandel.

Dreata? Petosiris.

Mas. *Luteo-testacea; alæ anticæ fasciis quatuor, posticæ duabus fuscis.*

Phalæna Petosiris, *Cram. Pap. Exot.* iv. 226, pl. 397, f. D.

Coromandel.

Fam. 4. PSYCHIDÆ.

Caput villosulum, nisi apud fœminas vermiformes. Proboscis nulla. Palpi hirsuti, sæpe breviores aut vix ulli, pilisque numerosis absconditi. *Mas.*—Antennæ pectinatæ vel ciliatæ. Alæ ad apices sæpissime plus minusve rotundatæ, nonnunquam acuminatæ. *Fœmina.*—Aptera, nisi apud genera transitoria. Antennæ minimæ apud fœminas araneiformes vel semivermiformes; nullæ apud vermiformes. Larvæ semper? involucris vitam degentes.

Psychidæ, *Bruand, Monogr. Psych.* 17, 113.
Psychides, *Boisd. Gen. et Ind. Méth. Eur. Lep.*
Tineæ Canopheræ, p. et Falsæ, *Hübn. Verz. Schmett*, 398, 400.
Tineidæ, p., *Stainton, Ins. Brit. Lep.* 16.

Several other divisions, such as the *Liparidæ*, the *Limacodidæ* and the *Bombycidæ* are represented in the *Psychidæ*, whose generally peculiar character is the case-enclosed larva and female moth. Many of the species much resemble the *Tineites*, and at some future time the family will probably be suppressed, and its genera divided among the above-mentioned groups.

A. *Fœmina* alata.
  A. Corpus robustum.
    a. Alæ anticæ apice acuminatæ. - - 21. Perophora.
    b. Alæ anticæ non acuminatæ. - - - 1. Typhonia.
  B. Corpus gracile. - - - - - 3. Psychoides.
B. *Fœmina* aptera.
  A. Corpus plus minusve gracile, aut alæ rotundatæ.
    a. Antennæ ramis plurimis.
      a. Alæ posticæ abdomen longe superantes. 4. Psychagrapha.
      b. Alæ posticæ abdomen non aut vix superantes.
        i. Alæ obscuræ. - - - - - 2. Psyche.
        ii. Alæ læte pictæ. - - - - 7. Pseudopasa.
      c. Abdomen alas posticas superans. - - 6. Psychanisa.
    b. Antennæ ramis paucis. - - 5. Cryptothelea.
  B. Corpus robustum; alæ anticæ sæpe acuminatæ.
    a. Antennæ *maris* plus triente basali late pectinatæ. 17. Panisa.
    b. Antennæ *maris* plus triente basali latissime pectinatæ. 13. Labedera.
    c. Antennæ *maris* plus dimidio basali latissime pectinatæ.
      a. Alæ anticæ sat latæ subacuminatæ, margine exteriore valde obliquo.

i. Alæ posticæ angulo interiore producto.
* Abdomen *maris* sat longum. - 19. GONOMETA.
** Abdomen *maris* longissimum. - 9. OIKETICUS.
ii. Alæ posticæ angulo interiore non producto. 20. ENTOMETA.
b. Alæ anticæ perangustæ, apice rotundatæ. 10. METURA.
D. Antennæ *maris* fere ad apices latissime pectinatæ.
a. Alæ anticæ breviusculæ. - - - 15. LOMERA.
b. Alæ anticæ longiusculæ.
i. Abdomen alas posticas non superans. - 14. PERINA.
ii. Abdomen alas posticas superans. 8. THYRIDOPTERYX.
E. Antennæ *maris* plus æqualiter pectinatæ.
a. Alæ anticæ venis 1a et 2a inferioribus connexis.
i. Abdomen alas posticas longe superans. - 11. CLANIA.
ii. Abdomen alas posticas vix superans. - 18. METISA.
b. Alæ anticæ venis 1a et 2a inferioribus non connexis.
i. Alæ posticæ angulatæ. - - - 16. NEMETA.
ii. Alæ posticæ non angulatæ. - - 12. EUMETA.

Genus 1. TYPHÔNIA.

Corpus sat robustum, vix villosulum. Caput parvum. Palpi breviter hirsuti. Abdomen alis posticis longius. Alæ elongatæ. *Mas.*—Antennæ pectinatæ.

Typhonia, *Bruand, Monogr. Psych.* 17, 113.
Bombyx, p., *Hübn.*
Typhonia et Melasina, *Boisd.*
Tænia, p., *Hübn.*
Chimæra, *Ochs.; Boisd.; Treits.; Freyer.*
Eyprepia, p., *Ochs.*
Chelonia, p., *Boisd.*
Psyche, p., *Herr.-Schæff.*
Stygia, *Herr.-Schæff.*

Division A.

Mas. Abdomen apice subquadratum. *Fœm.*—Antennæ subciliatæ, leviter ad basim incrassatæ. Abdomen acutum, oviductus exsertus.

Melasina, *Boisd.*

1. TYPHONIA LUGUBRIS.

Mas. *Nigro-fusca; antennarum plumulæ nigricantes; truncus albicans; alæ unitæ.* Fœm.—*Minus obscura; antennæ fere simplices leviter subciliatæ, ad basim paululum incrassatæ; alæ magis elongatæ, posticæ ad apicem angustiores.*

Involucrum *tubuliforme, solidum, sabuli vel tenuissimis saxorum granis conspersum.*

Larva P. Graminellæ, *vicina, sed caput solum bimaculatum.*

Typhonia Melas? *Duponch. Suppl. Hist. Nat. Lép. France,* pl. 56, f. 12.

Chimæra lugubris, *Hübn. Sphing.* pl. 51, f. 216, 217. *Ochs. Schmett. von Eur.* ii. 7, 5. *Boisd. Treits. Suppl.* x. 98. *Freyer, Beytr.* iii. 20, 77, pl. 116, f. 3. *Herr.-Schæff. Bomb.* pl. 20, f. 114.

Typhonia lugubris, *Duponch. Suppl. Hist. Nat. Lép. France,* ii. 101, pl. 8, f. 6.

Typhonia ciliarella, *Bruand, Monogr. Psych.* 18, pl. 1, f. 1.

France.

2. Typhonia ciliarivicinella.

Fœm. *Habitus necnon magnitudo* maris T. lugubris; *antennæ fere filiformes, vix ad basim incrassatæ; abdomen brevius quam apud* T. lugubris fœm.; *alæ fusco-nigricantes, concolores, margine obscuriore, fimbria anticis albicans, posticis rufo-cinerascens.*

Typhonia ciliarivicinella, *Bruand, Monogr. Psych.* 21, 2, pl. 1, f. 2.

France.

Division B.

Fœm. Antennæ ad basim valde incrassatæ; articuli singuli pilis squamosis instructi. Abdominis pars analis pilis numerosis obtecta.

3. Typhonia semilugubrella.

Fœm. *Habitus fere* T. ciliaris, *sed eâ minor; corpus gracilius; alæ angustiores, minus obscuræ, fimbria alba; posticæ ad apicem parum acutæ.*

Typhonia semilugubrella, *Bruand, Monogr. Psych.* 21, 3, pl. 1. f. 3.

France.

4. Typhonia melas.

Fœm. *Habitus, necnon magnitudo colorque* T. ciliarivicinellæ; *alæ posticæ ad apicem paullulo acutiores; fimbria fusca.*

Typhonia melas, *Boisd. Gen. et Ind. Méth. Eur. Lep.* 78, 618.

Typhonia melanosella, *Bruand, Monogr. Psych.* 22, 4, pl. 1, f. 4.

T. ciliarivicinella, *var.?*

Pyrenees.

5. Typhonia punctata.

Mas. *Corpus breve, fuscum; antennæ breves, sat pectinatæ; alæ quatuor ad apices rotundatæ; anticæ nigræ, fimbria punctisque numerosis albis; posticæ fuscæ, fusco fimbriatæ.*

Psyche punctata, *Herr.-Schæff. Bomb.* pl. 15, f. 80.
Typhonia punctatella, *Bruand, Monogr. Psych.* 23, 5, pl. 1, f. 5.
Typhonia semilugubrella, *mas.*?

Germany.

6. Typhonia melana.

Mas. *Corpus crassum, elongatum; antennæ longiores, brevius pectinatæ; alæ rotundatæ, nigræ, fimbria alba; anticæ punctis necnon maculis albis ornatæ.*

Psyche melana, *Frin. Herr.-Schæff. Bomb.* pl. 15, f. 79.
Typhonia melanatella, *Bruand, Monogr. Psych.* 24, 6, pl. 1, f. 6.
Typhonia lugubris, *var.* major?

Russia? Germany.

7. Typhonia ciliaris.

Mas et fœm. *Alæ ad apices rotundatæ.* Mas.—*Fusco-nigra; antennæ sat elongatæ, pectinatæ, nigræ; alæ fimbria alba, anticæ punctis parvulis albicantibus, in summo reticulatæ fasciis duabus obscuris, ad marginem tessellatæ.* Fœm.—*Nigra; antennæ nigræ, ad basim multum incrassatæ; abdomen valde elongatum, parte anali pilis obtectum; alæ elongatæ, fimbria nigra.*

Eyprepia ciliaris, *Ochs. Schmett. Eur.* iv. 350, 26.
Chelonia ciliaris, *Boisd. Ind. Méth.* 43.
Psyche ciliaris, *Herr.-Schæff. Bomb.* pl. 20, f. 112, 113.
Typhonia lugubrosella, *Bruand, Monogr. Psych.* 25, 7, 8, pl. 1, f. 7, 8.

South France. Austria. South Switzerland. Dalmatia.

8. Typhonia phryganilugubrella.

Fœm. *Habitus necnon color* fœminæ T. lugubris; *sed multo minor; antennæ crassiores.*

Larva *involucro tubuliformi vitam degens.*
Typhonia phryganilugubrella, *Bruand, Monogr. Psych.* 26, 9, pl. 2, f. 9.
Typhonia lugubris, *var.* minor?

South France.

Division C.

Alæ elongatæ; anticæ costa haud arcuata, sed potius leviter excavata. *Mas.*—Corpus robustum, pilosum. Caput majus. Palpi longiores. Antennæ breviter pectinatæ.

9. Typhonia stygiella.

Mas. *Corpus antice cinerascens, postice nigricans; pars analis fasciculo piloso flavescente insupra gaudens; alæ vitreæ, nitidæ; anticæ ad summum et costam, posticæ ad basim oramque inferiorem fusco fuliginosæ.*

Stygia Colchica, *Herr.-Schæff. Bomb.*
Typhonia stygiella, *Bruand, Monogr. Psych.* 27, 10, pl. 1, f. 10.
Turkey.

Note.—Bruand places between *Typhonia* and *Psyche* the genus *Heterogynis*, which is included with the *Zygænides* at page 115 of this Catalogue.

Genus 2. PSYCHE.

Larva subnuda, vermiformis, folliculum oblongum nudum vel pulvere granoso passim conspersum quamdiu vivit, gestans; Lichenibus parietum vel lapidum, rarius vero arborum vescens. Pupa glabra, lævis; in mare subangusta, alarum et antennarum involucro valde extenso; in *fœmina* subovata, obtusa, thorace brevissimo; in utroque sexu semper in folliculo inclusa, et post metamorphosim semiextricata. Imago *maris* tineiformis, nitidula; antennæ subbreves, plus minusve ciliatæ; palpi graciles, hirti, at distincti; frons lanata; abdomen villosum; pedes sublongi; alæ elongatulæ, glabræ, squamis nunquam destitutæ, minime hyalinæ. Volatus subdiurnus solitarius. *Fœmina* aptera, oblonga, vermiformis, semivermiformis vel araneiformis; antennæ breves; abdomen lanuginosum, terebra ad ova ducenda instructum.

Bombyx, p., *Fabr.; Borkh.; Esp.*
Psyche, p., *Schr.*
Tinea, p., *Hübn.*
Sterrhopterix, *Hübn. Verz. Schmett.* 399.
Leptopterix, *Hübn. Verz. Schmett.* 399.
Phalacropterix, *Hübn. Verz. Schmett.* 399.
Fumea, *Haw. Ent. Trans.; Steph. Ill. Brit. Ent. Haust.* ii. 81. *Curt.*
Thyridopteryx, p., *Steph.; Curt.*

Solenobia et Psyche, *Duponch.*
Sphinx, p., *Haw.*
Nudaria, p., *Haw.*
Talæperia, *Hübn. Verz. Schmett.* 400; *Zeller; Guenée, Ann. Soc. Ent. Fr. 2me Sér.* iv. 12.
Psyche et Lepidopsyche, *Newm. Zool.* viii. *App.* ci.
Talæporia, p., *Stainton.*
Psyche, *Bruand, Monogr. Psych.* 32, 114.
Psyche et Cochleophasia, *Curt.; Steph.*
Saccophora, *Sodoff. Bull. Soc. Imp. Mosc.* 1837, 12.

Division A.

Mas. Corpus gracile. Antennæ brevius ciliatæ. Alæ elongatæ, angustæ. *Fœmina.*—Semivermis, tubuliformis, pilosa, pedibus necnon antennis munita; oviductus elongatus, corpore brevior. *Involucrum* elongatum, papyraceum, quisquiliis et paleis orbatum.

This division seems to be more nearly allied to the *Tineites* than to the *Bombycites.*

1. Psyche politella.

Mas. *Corpus, frons et antennæ nigricantia; alæ anticæ immaculatæ, omnino flavo-cinereæ, nitidæ, fimbria concolori; posticæ cinereo-fuscæ, fimbria flavescente.* Fœmina.—*Recta, cylindrica, elongata, scutulis dorsalibus livescentibus.* Folliculum *elongatum, rectum, papyraceum, antice cylindricum, postice trigonum, haud granosum, linea longitudinali leviter angulosum.*

Psyche politella, *Ochs. Schmett. von Eur.* iv. 200. *Treits. Fischer-v.-Rosl.* 86, pl. 38, f. 2, a—c: *Zeller; Boisd. Guenée, Ann. Soc. Ent. Fr. 2me Sér.* iv. 13. *Bruand, Monogr. Psyche,* 33, 14, pl. 1, f. 14.
Solenobia Lefebvriella, *Duponch. Suppl. Hist. Nat. Lep. Eur.* 375.
France. Germany.

2. Psyche clandestinella.

Mas. *Magnitudo* P. Pseudobombycellæ; *alæ sicus apud* P. politellam, *sed pallidiores ac lucidiores; caput minus.* Fœmina *nec non* involucrum *ut apud* P. politellam *at minus utrumque.*

Psyche clandestinella, *Mann. Bruand, Monogr. Psyche,* 34, 15, pl. 1, f. 15.
Psyche politella *var.* lucida?
Austria.

3. Psyche pseudobombycella.

Mas. P. politella *minor; corpus cinereo-fuscum; fronte lanata, flavescente; antennæ concolores; alæ anticæ cinereo-flavæ, nitidæ, venis strigisque transversis obscurioribus tessellatæ, ad costam paullulum depressæ; posticæ cinereæ, nitidæ; fimbria concolor.* Fœmina *ut apud* P. politellam, *sed minor.* Involucrûm P. politellæ *simile, antice vero sicut postice trigonum.* Larva *cinerascens; caput triaque insupra segmenta antica cornea, lucida; pedes obscuri, extrema parte rubescentes.*

Psyche pseudobombycella, *Boisd. Gen. et Ind. Méth. Eur. Lep.* 79, 627. *Bruand, Monogr. Psych.* 34, 16, pl. 1, f. 16.
Taleporia glabrella, *Hübn. Verz. Schmett.* 400, 3867.
Tinea Pseudo-bombycella, *Hübn. Tin.* 212, mas.; 382, fœm.
Tinea tessellea, *Haw. Treits. Fischer-v.-Rosl. Abbild. Schmett.* 80, pl. 37, a—p.
Talæporia Pseudo-bombycella, *Zeller, Linn. Ent.* vii. *Guénée, Ann. Soc. Ent. Fr. 2me Sér.* iv. 13. *Staint. Ins. Brit. Lep.* 18, 2.
Psyche glabrella, *Ochs. Psych.* 8.
Solenobia Anderreggella, *Duponch. Suppl. Hist. Nat. Lep. Eur.*
Cochleophasia tessellea, *Curt.; Steph.*

France. Germany.

Solenobia minorella? *Duponch. Suppl. Hist. Nat. Lep. Eur.* 201.
Tinea triquetrella? *Hübn. Tin.* 373.
Taleporia triquetrella? *Hübn. Verz. Schmett.* 400, 3868.
Psyche triquetrella? *Zincken, Germ. Mag. Ent.* 5.

a—c. Europe. From M. Becker's collection.

Division B.

Mas. Corpus villosum, sat elongatum. Antennæ pectinatæ. *Fœmina* vermiformis, nuda, mollis, pedibus antennisqua orbata; terebra brevis. *Involucrum* paleis transversis contextum.

Sub-div. I.

Mas. Corpus robustius. Palpi pilis longis celati. Antennarum plumulæ haud longæ. *Fœminæ* pupa bicolor in qua vitam illa consumit. *Involucrum* paleis transversis contextum.

Section I.

Alarum anticarum vena inferior longe ab basi furcata.

4. Psyche atribombycella.

Mas. *Habitus* P. apiformis, *paululo major; corpus villosum elongatum, parte anali hirsutum; alæ fusco-nigræ, semidiaphanæ, ad basim fuliginosæ.* Fœminæ *pupa in medio nigra, nitida, antice necnon postice rubigineâ, ad caput elongata.* Involucrum *fusiforme* (*ut apud* P. apiformem), *in medio valde inflatum, serico crasso obtectum.*

Psyche atribombycella, *Bruand, Monogr. Psych.* 37, 17, pl. 1, f. 17.

Germany.

Section II.

Alarum anticarum vena inferior prope basim furcata.

5. Psyche apiformis.

Mas. *Corpus elongatum, denso nigricans, pilis postice necnon antice flavis; antennæ longiores, acutæ, flavescentes; alæ vitreo fuliginosæ, fimbria fusca; anticæ ad costam leviter depressæ.* Involucrum *ut apud* P. atribombycellam, *at in medio minus inflatum serico rariore.*

Bombyx apiformis, *Fabr. Ent. Syst.* iii. 1, 435, 87. *Esp. Schmett.* iii. 71, pl. 91, f. 7, 8. *Ross. Faun. Etr.* ii. 178, 1105, pl. 8, f. 2; *ed. Illig.* 284. *Mant.* ii. 20, 379. *Coqueb. Illustr. Icon. Dec.* 1, pl. 7, f. 4. *God. Pap. de France*, iv. 292, pl. 29, f. 7.

Tinea fucella, *Hübn. Tin.* pl. 44, f. 305.

Phalacropterix fucella, *Hübn. Verz. Schmett.* 399, 3859.

Psyche apiformis, *Ochs. Schmett.* iii. 177, 11; iv. 54, 13. *Meig. Syst. Beschr. Eur. Schmett.* iii. 12, 10, pl. 88, f. 16.

Psyche apiformella, *Bruand, Monogr. Psych.* 39, 18, pl. 1, f. 18.

South France. Italy.

6. Psyche constancella.

Mas. *Habitus* P. viciellæ, *sed minor; corpus haud elongatum, pilosissimum, necnon caput; palpi pilis brevissimis absconditi; antennæ breviter pectinatæ, haud acutæ; alæ subdiaphanæ, nigricantes.* Fœmina *ut apud* P. viciellam, *at minor.* Involucrum P. apiformis *simile sed brevius, serico crassiore obtectum.* Larva *robusta, capite* P. graminellæ, *segmentis autem anticis* P. calvellam *revocans.*

Psyche constancella, *Millière; Bruand, Monogr. Psych.* 39, 19, pl. 1, f. 19.

South France.

7. Psyche viciella.

Mas. *Magnitudo fere* P. villosellæ; *sed alæ latiores, valde rotundatæ, fusco-flavæ, haud diaphanæ, quasi villosulæ; corpus robustum, pilosum, alis concolor, parte anali flavescente; antennæ breve pectinatæ, acutæ.* Involucrum *in quintuplicem frontem regulariter structum.* Larva P. constancellæ *vicina.*

Tinea viciella? *Fabr. Mant. Ins.* ii. 132, 102. *Wien. Verz.* 133, 2, pl. 1, a, b.

Phalæna viciella? *Gmel. ed. Syst. Nat.* i. 5, 2445, 591.

Psyche viciella, *Bruand, Monogr. Psych.* 41, 20, pl. 1, f. 20. *Réaum. Ins.* iii. pl. 11, f. 7, 8. *Frisch. Ins.* vi. 16, pl. 7. *Geoff. Ins.* ii. 203, 50.

Germany.

8. Psyche fasciculella.

Mas. *Fusca, habitus* P. viciellæ, *sed minor; abdomen parte anali minus pilosum.* Fœm. — P. constancellæ *maxime affinis.* Involucrum *ut apud* P. viciellam.

Psyche fasciculella, *Herr.-Schæff. Bomb. Europ.* pl. 19, f. 106. *Bruand, Monogr. Psych.* 42, 21, pl. 1, f. 21.

Germany.

9. Psyche Stetinensis.

Mas. P. fasciculellæ *affinis, sed subdiaphanum; corpus minus robustum, pilis rufo-flavescentibus obtectum, necnon caput; antennæ rufulæ, barbulis densatis, haud elongatis, non fere ad apices brevioribus quam ad basim.* Fœm.—P. fasciculellæ *similis.* Involucrum *ut apud* P. fasciculellam.

Psyche Stetinensis, *Calunella, MSS.; Hering, Ent. Zeit. Stett.* vii. 228, 1.

Psyche Stettinensis, *Newm. Zool.* viii. *App.* c.

Psyche Stetinella, *Bruand, Monogr. Psych.* 42, 22, pl. 1, f. 22.

Germany.

a—f. Europe. From M. Becker's collection.

10. PSYCHE TABANIVICINELLA.

Mas. *Statura habitusque* P. albidæ, *sed antennæ breviores, fuscæ; corpus pilis numerosis fusco-flavescentibus obtectum, parte anali divergentibus.*

Psyche tabanivicinella, *Bruand. Monogr. Psych.* 43, 23, pl. 1, f. 23.
South France.

Sub-div. II.

Mas. Alæ vitreæ, quasi squamis orbatæ. *Fœminæ* pupa unicolor, unde non egreditur. *Involucrum* breve, crassum, globuliforme, muscis, vel herbaceis ramusculis, longitudinalibus contextum.

Fore branch of the internal vein with a much more decided curve, and hind wings with a veinlet less than in the preceding groups.

11. PSYCHE ALBIDA.

Mas. *Corpus caputque nigra, pilis sericeis albidis obtecta; antennæ albido nigricantes; alæ totæ vitreæ, lacteæ, venis costaque nigro-fuscis, fimbria fuscescente.* Fœmina *vermiformis, mollis, haud elongata, ochreo albicans.* Involucrum *sæpius* Leskeâ sericea, *aliquoties quisquiliis ramusculisque obtectum.* Larva *brevis, crassa; caput nigrum, lucidum; segmenta antica nigro-fusca, margine antico albicantia.*

Psyche albida, *Mercl, Ann. Soc. Ent. Fr.* 2*m Sér.* i. 81, pl. 4, No. 1. *Herr.-Schæff. Bomb. Eur.* pl. 20, f. 110, 111.
Psyche albella? *Meig. Syst. Beschr. Eur. Schmett.* iii. 12, 9, pl. 88, f. 15.
Psyche albivitrella, *Bruand, Monogr. Psych.* 44, 24, pl. 1, f. 24, 25 bis.

a—b. Spain. From M. Becker's collection.
c. Europe. From M. Becker's collection.

France. Germany.

Var. Mas. P. albidæ, *omnino similis, sed abdomen pilis nigris indutum.*

Psyche plumosella, *Ramb.*
Psyche Millinella, *Boisd. Ann. Soc. Ent.* v. 1852.
Psyche albivitrella *var.* plumosella. Abdomine nigro, *Bruand Monogr. Psych.* 48, 26.

South France. Spain.

12. Psyche Lorquinella.

Mas. P. albidæ *omnino similis, sed alæ anticæ ad apices leviter subnigricantes; antennarum barbulæ longiores, magis albicantes; abdomen pilis necnon alæ posticæ fimbriis margine interiore niveis, valdeque elongatis.* Fœm.—*Caput segmentaque anteriora fusca, maculis flavis.* Involucrum *ex Ulice confectum.*

Psyche Lorquinella, *Bruand, Monogr. Psych.* 46, 25, pl. 1, f. 25.
Psyche plumosella? *Ramb.*
Psyche albida, *var.*?

Andalusia.

Section I.

Mas. Corpus robustum. Alæ anticæ ad apicem parum rotundatæ. *Fœminæ* pupa unicolor, unde ea, si non copulavit, egreditur.

Sub-div. III.

Involucrum elongatum; infundibula variant.

13. Psyche Febretta.

Mas. P. villosella *minor, obscurior; corpus minus villosum, pilis, præcipue ad caput, magis flavescentibus; antennæ longius pectinatæ, rassatæ, apice attenuatæ; abdomen parte anali fere acutum.* Fœmina *ut apud* P. graminellam *necnon* P. villosellam, *sed major.* Involucrum P. graminellæ (*var.* Paleiferellæ) *vicinum, at majus.*

Psyche Febretta, *Boyer de Fonscol. Ann. Soc. Ent. Fr.* iv. 107, pl. 1, E, f. 8—10. *Duponch. Suppl. Hist. Nat. Lép. France. Herr.-Schæff. Bomb. Eur.* pl. 19, f. 105.
Psyche Febretella, *Bruand, Monogr. Psych.* 49, 27, pl. 1, f. 27.

Provence. Spain. Corsica.

14. Psyche villosella.

Mas. *Fuliginoso-fusca; corpus robustum, pilosum;* P. graminellæ *minor; antennæ brevius pectinatæ, longiores; alæ minus latiores, costâ anticarum paululum sinuata.* Fœmina *ut apud* P. graminellam. Involucrum *brevibus paleis necnon quisquiliis obtectum.*

Psyche villosella, *Ochs. Schmett.* iii. 180, 13; iv. 54, 15. *Meig. Syst. Beschr. Eur. Schmett.* 10, 4, pl. 88, f. 11. *Herr.-Schæff. Bomb. Eur.* pl. 19, f 100. *Bruand, Monogr. Psych.* 51, 28, pl. 1, f. 28.
Bombyx villosella, *God. Pap. de France,* iv. 287, pl. 29, f. 1, 2.

Var. β. Mas. P. villosellæ *omnino similis, sed paululo major.* Involucrum *Ericæ ramulis obtectum.*

Penthophera nigricans, *Curt. Brit. Ent.* 213.
Pachythelia nigricans, *Westw. Proc. Ent. Soc. Lond.* v.
Psyche villosella, *var.* nigricantella, *Bruand, Monogr. Psych.* 52, 29, pl. 1, f. 29.
Oiketicus nigricans, *Westw. Proc. Zool. Soc. Lond.* (1854) 220, pl. 34, f. 1.

a—c. England. From Mr. Stephens' collection.
d—f. North Scotland. From Mr. Stevens' collection.
g. (Larva-case). Dorsetshire. Presented by J. Dale, Esq.

Var. γ. *Fusco-cinerea;* P. villosellæ *affinis; antennæ paullo breviores; alæ paululo angustiores.*

Psyche cinerella, *Duponch. Suppl. Hist. Nat. Lép. France.*
Psyche villosella, *var.* cinerella, *Bruand, Monogr. Psych.* 53, 30, pl. 1, f. 30.

France.

Var. δ? Mas. *Alarum venis* var. cinerellæ *maxime affinis; colore autem necnon alarum forma ad* P. villosellam *accedit.*

Psyche casanella, *Boisd. MSS.*
Psyche cinerella, *var.* casanella, *Bruand, Monogr. Psych.* 53, 31, pl. 1, f. 31.

Note.—Psyche grandiella, *Anderregg, Boisd. Gen. et Ind. Méth.* 79, 634.
Malacosoma Franconica *detrita.* See *Bruand, Monogr. Psych.* 54.

15. Psyche magniferella.

Fœm. P. graminellæ *affinis, sed major.* Involucrum *caulibus haud mediocribus obtectum.* Larva P. graminellæ *fere similis; pruno spinosâ vescitur.*

Psyche magniferella, *Bruand, Monogr. Psych.* 54, 32, pl. 1, f. 32.
Psyche villosella, *Bruand, Cat. du Doubs,* 1162.
Psyche villosellæ, *Ochs.* Var.?

France.

Section II.

Mas. Corpus minus robustum. Antennarum barbulæ longiores. *Involucrum* forma valde variat.

16. PSYCHE GRAMINELLA.

Mas. *Antennæ nigræ, longius quam apud* P. villosellam, *brevius quam apud* P. Febretta *pectinatæ; alæ latæ, nigricantes, subdiaphanæ.* Fœm.—P. magniferellæ *similis, sed minor.* Involucrum *foliis exsiccatis nigro-fuscis indutum, apud varietatem* Paleiferellam *paleis transversis obtectum.*

Bombyx vestita, *Fabr. Sp. Ins.* ii. 204, 146; *Mant. Ins.* ii. 132, 203; *Ent. Syst.* iii. 1, 481, 232. *Esp. Schmett.* iii. pl. 44, f. 1—5. *Wien. Verz.* 133, A, 1.

Phalæna vestita, *Gmel. ed. Syst. Nat.* i. 5, 2445, 592.

Note.—Ochsenheimer cites many of the earlier Entomological authors for synonyms of this *Psyche*, but the descriptions in many cases may refer to other species.

Bombyx graminella, *Borkh. Schmett.* iii. 274, 102.

Tinea vestitella, *Hübn. Tin.* pl. 1, f. 1.

Sterrhopterix vestitella, *Hübn. Verz. Schmett.* 399, 3854.

Psyche vestita, *Meig. Handb.* 121, 43, pl. 11, f. 8; *Syst. Beschr. Eur. Schmett.* iii. 9, 1, pl. 98, f. 8.

Psyche graminella, *Fischer, Abbild. zur Berich. und Erg.* 103, pl. 41, f. a—n.

Psyche graminella, *Ochs. Schmett.* iii. 181, 14; iv. 54, 16. *Meig. Syst. Beschr. Eur. Schmett.* iii. 10, 2, pl. 88, f. 9. *Bruand, Monogr. Psych.* 55, 33, pl. 1, f. 33.

Bombyx graminella, *God. Pap. de France*, iv. 284, pl. 28, f. 5—7.

Lepidopsyche graminella, *Newm. Zool.* viii. *App.* ci.

Var. β. Psyche paleiferella, *Bruand, Cat. du Doubs*, 1161. *God.* pl. 29, f. 2.

a—d. Europe. From M. Becker's collection.

e. ———?

17. PSYCHE MAGNELLA.

Mas. *Antennæ ut apud* P. graminellam; *statura minor; alæ nigro-cinereæ, diaphanæ, anticæ costa paululum depressa.* Involucrum *ramulis tenuissimis, densis, subrubicundis obtectum.*

Psyche magnella, *Boisd. MSS. Bruand, Monogr. Psych.* 58, 34, pl. 1, f. 34.

Marseilles.

Var. Minor? *Antennæ dimidio corporis fere longiores, quasi 31-articulatæ, articulis 3—30 ramulos duos ad apicem emittentibus; alæ hyalinæ, nitidæ, pilis nigerrimis sparsis obsitæ; corporis dorsum nigrum nitidum, pilis undique nigris obsitum; abdomen lateribus apiceque testaceis.*

Psyche Fenella, *Newm. Zool.* viii. *App.* xcix.

England. France. Germany.

18. PSYCHE OPACELLA.

Mas. P. magnellæ *affinis, at minor; color pellucidior; palpi magis producti.* Fœmina *minus mollis quam* P. graminellæ fœmina; *pauldum lanata, fere ut apud* P. muscellam, *sed segmentorum anticorum parte superiore obscurior.* Involucrum *ut apud* P. magnellam, *sed minus.*

Psyche opacella, *Herr.-Schæff. Bomb.* pl. 19, f. 102. *Bruand, Monogr. Psych.* 59, 35, pl. 1, f. 35.

Sterrhopterix opacella, *Weaver, Zool.* ix. 3311.*

Fœm. *Brevis, fasciculis octo aut decem, alis pedibusque nullis.*

Europe.

a—c. Scotland. From Mr. Stephens' collection.
d—f. Scotland. From Mr. Stevens' collection.

Section III.

Mas. Antennæ apice acutæ. Alæ anticæ angustiores, ad apices valde rotundatæ.

Sub-section I.

Vena longitudinalis areolæ discalis anterior apice bifurcata aut trifurcata.

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* Psyche ——? Fœm. S. opacellæ *longior, nigra nitens, fasciculis duabus dorsalibus tribusque lateralibus minimis, linea pectorali nigra, antennis pedibusque distinctis; caput porrectum.*

Sterrhopterix ——? *Weaver, Zool.* ix. 3311.

19. PSYCHE SICULELLA.

Mas. P. bicolorellæ *vicina, sed major; alæ paululo obscuriores, anticæ costa leviter sinuata, non ad basim rufescentes; corpus sicut apud* P. bicolorellam, *necnon antennæ; palpi rufi, spissi.*

Psyche Siculella, *Boisd. MSS.* *Bruand, Monogr. Psych.* 60, 36, pl. 1, f. 36.

Sicily.

Sub-section II.

Alæ posticæ venis tribus inferioribus; vena interna vix bifurcata, fere ad basim.

20. PSYCHE BICOLORELLA.

Mas. *Corpus hirsutum, nigro-fuscum; oculi magni; antennæ acutæ, pennis fuscis parum elongatis; alæ valde elongatæ necnon angustæ, diaphanæ, cinereo-fuscæ, in medio pallidæ, ad basim rufescentes; anticæ ad apices rotundatæ et quasi musciformes; posticæ breviores.*

Psyche bicolorella, *Boisd. MSS.* *Bruand, Monogr. Psych.* 60, 37, pl. 1, f. 37.

Spain.

21. PSYCHE HIRTELLA.

Mas. *Corpus villosum, pilis nigro-fuscis apice anali valde hirtum; statura fere* P. plumiferellæ; *antennæ paullo longiores, fuscæ; alæ angustiores, diaphanæ; anticæ costa fimbriaque fusco-nigris.*

Psyche hirsutella, *Duponch. Suppl. Hist. Nat. Lép. France*, pl. 56, f. 5.

Psyche hirtella, *Boisd. MSS.* *Bruand, Monogr. Psych.* 61, 38, pl. 1, f. 38.

Lapland.

Sub-div. IV.

Fœmina ex involucro non egrediens.

Section I.

Antennæ *maris* longius pectinatæ.

22. Psyche stomoxella.

Mas. *Corpus elongatum, pilis nigris valde hirsutum; palpi elongata, spissi; antennæ, ut apud* P. plumiferam, *longius pectinatæ; alæ angustæ, elongatæ, diaphanæ, cinereo nigricantes; fimbria nigricans.* Fœmina *vermiformis, crassa, segmentis tribus posticis parce lanuginosis.* Involucrum *paleis tenuibus longitrorsum positis indutum.*

Psyche angustella, *Herr.-Schæff. Bomb. Eur.* pl. 19, f. 104.
Psyche stomoxella, *Boisd. Soc. Ent.* 1852. *Bruand, Monogr. Psych.* 62, 39, pl. 1, f. 39.
Bombyx muscella? *Esp. Schmett.*

France. Germany.

23. Psyche hirsutella.

Mas. P. muscellæ *affinis; caput minus productum; palpi longiores; alæ longiores.* Fœmina *ochreo-rufescens,* P. graminellæ *formam revocans, sed gracilior; caput nigricans; segmenta antica scutulis nigris.* Involucrum P. graminellæ *similis, sed gracilius; foliis necnon quisquiliis nigricantibus obtectum.*

Tinea hirsutella, *Wien. Verz.* 7, 318.
Psyche hirsutella, *Herr.-Schæff. Bomb.* pl. 20, f. 109. *Bruand, Monogr, Psych.* 64, 40, pl. 1, f. 40.
Tinea viciella, *Hübn. Tin.* 3.
Leptopterix hirsutella, *Hübn. Verz. Schmett.* 399, 3856.

Austrian Alps.

24. Psyche massilialella.

Mas. P. plumiferæ *similis, sed multo minor; palpi valde producti; alæ subdiaphanæ.* Fœmina, *ut apud* P. Stomoxellam. Involucrum *quisquiliis lignosis obtectum.*

Psyche massilialella, *Bruand, Monogr. Psych.* 66, 41, pl. 1, f. 41.

South France.

25. Psyche Bellierella.

Mas. P. plumiferellæ *vicina; corpus paullo gracilius; palpi minus hirsuti; antennarum barbulæ breviores; alæ magis elongatæ.*

Psyche Bellierella, *Bruand, Monogr. Psych.* 67, 42, pl. 2, f. 42.
Psyche massialellæ aut plumiferellæ, *var. ?*

France. Switzerland.

26. Psyche Tabanella.

Mas. P. albida *paululo major; corpus pilis nigris numerosis villosum; palpi haud distincti aut pilis nigro-fuscis celati; antennæ nigræ, valde plumosæ; alæ diaphanæ, aut potius vitreæ, colore fuliginoso, fimbria nigricante, costa nigra, venis gracilioribus.*

Psyche Tabanella, *Boisd. MSS. Bruand, Monogr. Psych.* 67, 43, pl. 2, f. 43.

Spain.

27. Psyche muscella.

Mas. P. albida *minor*, P. plumifera *autem major; alæ latiores, vitreæ, fimbria fusca; caput productum; palpi parum elongati.*

Phalæna muscella, *Gmel. ed. Syst. Nat.* i. 5, 2445, 593.
Bombyx muscella, *Fabr. Mant. Ins.* ii. 132, 204; *Ent. Syst.* iii. 482. *Wien. Verz.* 133, A, 3.
Bombyx atra, *Borkh, Schmett.* iii. 285, 105. *Esp. Schmett.* iii. pl. 44, f. 7.
Bombyx graminella? *Vieweg, T. V.* i. 68, 76.
Bombyx pulla, *Brahm, Ins. Kalend.* 501.
Tinea muscella, *Hübn. Tin.* pl. 2, f. 8.
Phalacropterix muscella, *Hübn. Verz. Schmett.* 399, 3860.
Fumea plumistra, *Haw. Lep. Brit.* 374.
Fumea muscella, *Steph. Ill. Brit. Ent. Haust.* ii. 82, 3.
Fumea musca, *Haw. Lep. Brit.* 373.
Psyche muscella, *Ochs. Schmett.* iii. 174, 9; iv. 54, 11. *Meig. Syst. Beschr. Eur. Schmett.* iii. 11, 5, pl. 88, f. 12. *Boisd. Gen et Ind. Méth. Eur. Lep.* 79, 631. *Bruand, Monogr. Psych.* 68, 44, pl. 2, f. 44.

France. Germany.

Psyche nigrella? *Meig. Syst. Beschr. Eur. Schmett.* iii. 11, pl. 99, f. 2.
Psyche atrella? *Meig. Syst. Beschr. Eur. Schmett.* iii. 12, 8, pl. 88, f. 14.

a—u. England. From Mr. Stephens' collection.
w—x. England. From Mr. Foxcroft's collection.
y—cc. England.
dd. France.

28. Psyche plumifera.

Mas. *Statura parva*, P. albidæ dimidio; *corpus pilosum, hirtum; palpi elongati; antennæ valde pectinatæ; alæ subdiaphanæ, haud nitidæ, fimbria obscuriore.* Involucrum *gracile, Hypnorum fragmentis indutum.*

Psyche plumifera, *Mann, Ent. Zeit. Stett.* v. 173. *Herr.-Schæff. Bomb. Eur.* pl. 19, f. 103.
Psyche plumiferella, *Bruand, Monogr. Psych.* 69, 45, pl. 2, f. 45.
Germany.

Section II.

Mas. Corpus gracile. Antennarum plumulæ valde elongatæ ac graciles.

29. Psyche plumigerella.

Mas. *Magnitudo* P. massiliælellæ; *corpus multum gracile, villosum; antennarum plumulæ valde elongatæ ac tenues; alæ nigræ, omnino opacæ, fimbria longissima, pilis gracillimis.* Fœmina *vermiformis, haud elongata, antice necnon postice leviter lanata, colore flavo.* Involucrum *palcis longitudinalibus brevibus obtectum.* Larva P. albidæ *ac* Roboricolellæ *vicina.*

Tinea plumigerella, *Hübn. Tin.* pl. 31, f. 213. *Suppl.* pl. 66, f. 3.
Epichnopterix plumigerella, *Hübn. Verz. Schmett.* 400, 3862.
Psyche plumistrella, *Herr.-Schæff. Psychides. Bruand, Monogr. Psych.* 70, 46, pl. 2, f. 46.
Europe.

Sub-div. V.

Mas. Corpus gracile. Antennæ breviter pectinatæ. Alæ apice minus rotundatæ. *Fœminæ* pupa bicolor.

30. PSYCHE CALVELLA.

Mas. *Corpus gracilius, pilis brevibus flavis parce villosum; caput compressum; oculi magni; antennæ breviter pectinatæ; alæ cinereæ, subdiaphanæ, paululum hyalinæ, venis obscurioribus.* Fœmina *vermiformis, brevis, pupa bicolore.* Involucrum *quisquiliis, vel paleis transversis, haud regulariter positis, obtectum.* Larva P. crassiorellæ *nec non* P. albidæ *vicina.*

Bombyx furva, *Borkh. Schmett.* iii. 103..
Tinea hirsutella, *Hübn. Tin.* pl. 1, f. 3.
Nudaria fusca, *Haw. Lep. Brit.* 157, 3.
Psyche calvella, *Ochs. Schmett. von Eur.* iii. 172, 6. *Germar, Boisd. Gen. et Ind. Méth, Eur. Lep.* 79, 625.
Sterrhopterix calvella, *Hübn. Verz. Schmett.* 399, 3855. *Bruand, Monogr. Psych.* 71, 47, pl. 2, f. 47.
Psyche fuscella, *Meig. Syst. Beschr. Eur. Schmett.* iii. 10, 3, pl. 88, f. 10.
Psyche fusca, *Steph. Ill. Brit. Ent. Haust.* ii. 80, 1, pl. 18, f. 3, 4. *Westw. and Humph. Brit. Moths,* i. 83, pl. 16, f. 16, 17.
Bombyx viciella, *God. Lép. France,* iv. 288, pl. 29, f. 3, 4.
Psyche viciella, *Herr.-Schæff. Bomb. Eur.* pl. 20, f. 107.

Europe.

a—d. England. From Mr. Stephens' collection.
e—g. England. From Mr. Foxcroft's collection.
h—k. Europe. From M. Becker's collection.

Sub-div. VI.

Mas. Corpus gracile. Alæ elongatæ, oblongæ. *Fœmina.*— Corpus heliciforme, sicut involucrum.

Section I.

Mas. Antennæ breve pectinatæ. Alæ apice minus rotundatæ.

31. PSYCHE HELICINELLA.

Mas. *Corpus concolor, gracile; antennæ elongatæ, barbulis haud longis nec spissis pectinatæ; alæ elongatæ, semidiaphanæ, obscuriores quam apud* P. hirsutellam, *nigro suffumatæ, fimbria vix ulla.* Fœmina *cinerea, mollis, heliciformis.* Involucrum *heliciforme, graneis tenuibus arenosis vel terrosis conspersum.* Larva *sicut involucrum, heliciformis; fusca; scutulis segmentorum anticorum obscurioribus; caput nigrum,*

Psyche helicinella, *Herr.-Schæff. Bomb.* pl. 20, f. 108. *Bruand, Monogr. Psych.* 73, 47, 48, pl. 2, f. 47, 48.
———, *Réaum. Ins.* iii. *Mém.* 5, pl. 15, f. 20–22. *Vallot, Mém. de l'Acad. de Dijon* (1818, 1827, 1842).
France.

Section II.

Mas. Antennæ crenatæ, apice acutæ.

32. PSYCHE CRENULELLA.

Mas. *Antennæ denticulatæ; alæ oblongæ, fere lanceolatæ, ochreo pallidæ, subhyalinæ, fimbria concolore.*

Psyche crenulella, *Bruand, Monogr. Psych.* 76, 49, pl. 2, f. 49.
South France.

Sub-div. VII.

Mas. Parce pilosum. Antennæ rude pectinatæ. *Fœmina* ignota.

Section I.

Mas. Corpus gracile.

33. PSYCHE PECTINELLA.

Mas. *Murina; antennæ rude pectinatæ; alæ oblongæ; fimbria fuscescens et nitens; costa nigricans.*

Psyche pectinella, *Ochs. Schmett. von Eur.* iii. 170, 4. *Bruand, Cat. du Doubs*, 1165; *Monogr. Psych.* 76, 50, pl. 2, f. 50.
Talæporia murinella, *Boisd. Gen. et Ind. Méth.* 629. *Duponch. Suppl. Hist. Nat. Lép. France. Guenée, Ann. Soc. Ent. Fr.* 2me *Sér.* iv. 14.
Psyche pectinella, *var.* elongatella, *Bruand, Cat. du Doubs*, 1166; *Monogr. Psych.* 76, 51. *Alæ magis elongatæ, paullulo obscuriores.*
Bombyx pectinella, *Fabr. Ent. Syst.* iii. 482. *Wien. Verz.* 5.
Bombyx nana, *Borkh. Schmett.* 104.
Tinea pectinella, *Hübn. Tin.* pl. 1, f. 5.
Epichnopterix pectinella, *Hübn. Verz. Schmett.* 400, 3864.

Fumaria pectinea, *Haw. Lep. Brit.* 473. *Steph. Ill. Brit. Ent. Haust.* ii. 83, 5.

a, *b*. Europe. From M. Becker's collection.

34. PSYCHE PERLUCIDELLA.

Mas. *Statura fere* P. pectinellæ, *paullulo minor, pallidior, magis diaphana.*

Psyche perlucidella, *Mann. Bruand, Monogr. Psych.* 77, 52.

Germany.

35. PSYCHE NUDELLA.

Mas. *Cinerea; statura fere* P. perlucidellæ; *palpi minus producti; antennæ plumulis rarioribus minutæ; alæ angustiores.* Fœmina P. pullelæ *similis, sed parte anali magis lanata.* Involucrum *tubuliforme, parte posteriore fere acutum.*

Psyche nudella, *Ochs. Schmett. von Eur.* iii. 173, 7. *Bruand, Cat. du Doubs*, 1168; *Monogr. Psych.* 78, 53, pl. 2, f. 53.

Psyche nudella? *Duponch. Suppl. Hist. Nat. Lép. France*, pl. 56, f. 8.

France. Germany.

Section II.

Mas. Corpus robustum.

36. PSYCHE TARNIERELLA.

Mas. *Corpus robustum; palpi breves, hirsuti; antennæ plumulis crassis elongatis haud numerosis pectinatæ; abdomen parce pilosum; alæ fusco-flavescentes, margine flavo sericeo.*

Psyche Tarnierella, *Bruand, Cat. du Doubs*, 1174; *Monogr. Psych.* 79, 54, pl. 2, f. 54.

France.

Psyche Tarnierella, *var.* myrmidonella, *Guenée. Bruand, Monogr. Psych.* 80, 55, pl. 2, f. 55.

Sub-div. VIII.

Mas. Corpus gracile. *Fœmina.*—Brevior, necnon minus mollis quam brevis.

37. Psyche Bombycella.

Mas. *Corpus lanuginosum, antice flavescens postice cinereum; antennæ cinereo-rufulæ, breve pectinatæ; alæ ochreo-cinereæ, lucentes, strigis parvulis fuscis tessellatæ.* Fœmina *vermiformis, mollis, crassa,* P. graminellæ *dimidio, necnon colore similis; caput minimum; oculi nigri.* Involucrum P. Stomonellæ *simile.* Larva P. Calvella *vicina.*

Psyche Bombycella, *Ochs. Schmett. von Eur.* iii. 171, 5. *Bruand, Cat. des Doubs,* 1170; *Monogr. Psych.* 80, 56, pl. 2, f. 5, 6.

Tinea Bombycella? *Hübn. Tin.* pl. 1, f. 4. *Wien. Verz. Tin.* 133, A. 4. *Illig. N. Ausg. Dess.* 2, 79, 4. *Lang. Verz.* 2, 215, 1450.

Bombyx Bombycella, *Borkh. Eur. Schmett.* iii. 288, 108.

Bombyx Bombella? *Fabr. Ent. Syst.* iii. 1, 482, 234.

Fumea Bombycella, *Steph. Ill. Brit. Ent. Haust.* ii. 83, 4.

Europe.

38. Psyche rotundella.

Mas. *Statura* P. Bombycellæ *parvæ, necnon affinis; colore paullulo obscuriore, alis magis rotundatis haud tessellatis.*

Psyche rotundella, *Bruand, Cat. du Doubs,* 1171; *Monogr. Psych.* 82, 57, pl. 2, f. 57.

P. bombycella, *var.?*

Switzerland.

Fœm.? *Piriformis, rufo-fusca, haud mollis.* Involucrum P. pullæ *similis, sed longius.*

Psyche rotundella, *fœm.? Bruand, Monogr. Psych.* 83, 58, pl. 2, f. 58.

France.

39. Psyche Ledereriella.

Mas. *Colore necnon alarum forma* P. pullæ *similis, sed major; antennis autem, et corpore* P. Bombycellæ *affinis.*

Psyche Ledereriella, *Bruand, Monogr. Psych.* 84, 59, pl. 2, f. 59.

Altai, Siberia.

40. Psyche nigrolucidella.

Mas. P. nudellæ *affinis, obscurior; venæ crassiores; antennæ ut apud* P. pullam.

Psyche nigrolucidella, *Bruand, Cat. du Doubs*, 1167 bis; *Monogr. Psych.* 84, 66, pl. 2, f. 60.

France.

41. Psyche pulla.

Mas. *Corpus breve, parce villosum; antennæ plumulis tenuibus pectinatæ; alæ nigræ, haud nitidæ, sed potius villosæ, opacæ, margine concolore, usque ad mediam costam extensa.* Fœmina *vermiformis, brevicilla, mollis, rubiginosa; caput attenuatum; antennæ pedesque haud distincta; segmentum 1um albicans, lanuginosum.* Involucrum *cylindricum, paleis longitrorsum positis obtectum.* Larva *albo livida, fasciis punctisque fusco-nigris antice maculata; caput nigrum.*

Psyche pullela, *Bruand, Cat. du Doubs*, i. 172, 1173; *Monogr. Psych.* 85, 61, pl. 2, f. 61.
Var. β. Psyche pullisimelella, *Bruand, Cat. du Doubs*, 1173.
Psyche pulliparvella, *Bruand, Monogr. Psych.* 86, pl. 2, f. 61.
Bombyx pulla, *Esp. Schmett.* iii. pl. 44, f. 8. *Borkh. Schmett.* iii. 287, 106.
Tinea plumella, *Wien. Verz.* 133, A. 6. *Hübn. Tin.* pl. 1, f. 7.
Psyche pulla, *Ochs. Schmett.* iii. 167, 1; iv. 54, 1.
Epichnopterix plumella, *Hübn. Verz. Schmett.* 400, 3863. *Meig. Syst. Beschr. Eur. Schmett.* iii. 11, 7, pl. 88, f. 13.
Fumea pulla, *Steph. Ill. Brit. Ent. Haust.* ii. 82, 2.

a—t. England. From Mr. Stephens' collection.
v—x. England. From Mr. Foxcroft's collection.
y—aa. Europe. From M. Becker's collection.

42. Psyche radiella.

Mas. *Statura* P. pullæ, *necnon* P. intermediellæ; *minus nigra quam* P. pulla, P. intermediella *autem obscurior; venæ alarum anticarum margines versus plane distinctæ.*

Fumea radiella, *Curt. Brit. Ent.* vii. pl. 332.
Psyche radiella, *Bruand, Monogr. Psych.* 87, 61 bis, pl. 2, f. 61 ter.
Fumaria plumistrea, *Haw. Lep. Brit.* 474.
Fumea muscella, *Steph. Ill. Brit. Ent. Haust.* ii. 82.
Psyche pulla, *var.*?

Europe.

43. Psyche plumella.

Statura P. pullæ; *fusca; fimbria paullulo longior.*

Psyche plumella, *Ochs. Schmett. von Eur.* iii. 168, 2. *Bruand, Monogr. Psych.* 87, 62, pl. 2, f. 62.
Psyche pulla, *var.?*

France. Germany. Spain.

44. Psyche reticulatella.

Mas. *Fusco-cinerea; antennæ plumulis tenuibus pectinatæ; alæ rotundatæ, nitentes margine fusco, fimbria albicante et nitente; anticæ pallide albo-cinereæ, fasciis transversis fuscis tessellatæ, posticæ subhyalinæ.*

Psyche reticulatella, *Mann; Bruand, Monogr. Psych.* 88, 63, pl. 2, f. 63.

Austria.

45. Psyche undulella.

Mas. *Habitus* P. pullæ, *sed paullulo minor; corpus fuscum; abdomen ochraceum; antennæ barbulis tenuibus flavis pectinatæ; abdomen ochraceum; alæ ochreo-albæ, venis lineisque transversis fuscis tessellatæ.*

Psyche undulella, *Treitsch; Fischer-v.-Roslerstamm; Abbild. Schmett.* 86, pl. 38, f. 3, a—e. *Bruand, Monogr. Psych.* 89, 64, pl. 2, f. 64.

Bannat. South Russia.

46. Psyche reticella.

Mas. P. reticulalellæ *fere dimidia; color magis diaphanum; antennæ plumulis raris pectinatæ; alæ strigis fuscis, posticæ præsertim in medio tessellatæ; venæ apice fusco maculatæ. Antennæ corporis dimidio viæ longiores, quasi* 13-*articulatæ, articulis* 2 — 12-*ramulos duos ad apicem emittentibus; alæ albidæ, fuliginoso reticulatæ; corpus nigrum, lanugine albido vestitum.*

Psyche reticella, *Newm.* (*Zool.* v. 1863) *Zool.* viii, xciv. *Bruand, Monogr. Psych.* 90, 65, pl. 2, f. 65.
Fumea reticella, *Steph. Cat. Lep. Brit.* 57, 3.

a. England. From Mr. Stephens' collection.
b. England. From Mr. Stevens' collection.
c. England.

47. PSYCHE LAPIDICELLA.

Mas. *Antennæ fere ut apud* P. pullam, *barbulis paullulo minus elongatis; alæ elongatæ; anticæ cinereæ, strigis obscure fuscis; posticæ pallide fusco-cinereæ.* Fœmina *fusca, formâ* P. labulellam *et* P. triquetrellam *revocans.* Involucrum *conicum, recurvum.* Larva *fusca.*

Psyche lapidicella, *Bruand, Monogr. Psych.* 90, 66, pl. 2, f. 66.
Talæporia lapidicella, *Zeller, in not. Guenée Ann. Soc. Ent. Fr.* 2*me Sér.* iv. 14.
——— ———, *Réaum. Ins.* iii. *Mém.* 5, pl. 15; f. 1—3. *Geoffr. Ins. Par.*
Psyche pectinella, *Duponch. Suppl. Hist. Nat. Lep. France.*
France.

48. PSYCHE INNITIDELLA.

Mas. *Fusca, haud nitens; statura* P. pullæ, *var.* pulliparvellæ; *alæ posticæ paullulo angustiores, necnon minores; caput minimum, rotundatum; antennæ acutæ; alæ fimbria concolore, margine obscuriore.*

Psyche innitidella, *Bruand, Monogr. Psych.* 91, 67, pl. 2, f. 67.
Switzerland.

Division C.

Fœmina araneiformis.

Sub-div. I.

Alæ parum elongatæ.

49. PSYCHE CRASSIORELLA.

Mas. *Alæ oblongæ, flavo-fuscæ, nitentes; fimbria concolor; margo obscurior.* Fœmina *araneiformis, sequentibus omnibus major.* Involucrum *magnum, paleis longitrorsum positis indutum.* Larva *pallide livida, strigis punctisque fuscis segmentorum anticorum parte superiore gaudens; caput nitens, corneum, lineis necnon punctis fuscis.*

——— ———, *Reaum. Ins.* iii. *Mém.* 5, pl. 11, f. 8.
Fumea crassiorella, *Guenée.*
Psyche crassiorella, *Bruand, Monogr. Psych.* 92, 68, pl. 2, f. 68.
France.

50. PSYCHE INTERMEDIELLA.

Mas. *Portus* P. crassiorellæ, *sed obscurior, et multo minor.* Fœmina P. crassiorella *minor, minus obscura.* Involucrum *minimum, paleis tenuissimis obtectum.* Larva *minima,* P. crassiorellæ *affinis, sed pallidior.*

Psyche intermediella, *Guenée; Bruand, Cat. du Doubs,* 1176; *Monogr. Psych.* 95, 69, pl. 2, f. 69.
Psyche Carpini, *Schr. Faun. Boic.* ii. 2, 90.
Bombyx nana, *Borkh. Eur. Schmett.* iii. 283.
Tinea nitidella, *Hübn. Tin.* pl. 1, f. 6.
Epichnopterix nitidella, *Hübn. Verz. Schmett.* 400, 3865.
Fumea nitida, *Haw. Lep. Brit.* 374.
Fumea nitidella, *Steph. Ill. Brit. Ent. Haust.* ii, 82, 1.
France.

51. PSYCHE COMITELLA.

Mas. P. crassiorella *minor; alæ paullulo minus elongatæ, strigis parte externa tessellatæ.* Fœmina P. crassiorella *affinis, at dilucidior; pili lanuginosi partis analis obscuriores.* Involucrum P. crassiorellæ *similis, sed paleis gracilioribus et rarioribus.* Larva P. crassiorella *pallidior, lineis autem nigris; capitis præsertim lineamentis differt.*

Psyche comitella, *Bruand, Cat. du Doubs,* 1177; *Monogr. Psych.* 96, 70, pl. 2, f. 70.
Psyche nitidella? *Ochs. Schmett. von Eur.* iii. 169, 3.
France. Germany?

52. PSYCHE SAXICOLELLA.

Mas. P. comitellæ *habitus et magnitudo; color albo-cinereus, strigis nullis, margine costæque summo nigro-cinereis; venis apices versus obscurioribus.*

Psyche saxicolella, *Bruand, Cat. du Doubs,* 1178. *Monogr. Psych.* 98, 71, pl. 2, f. 71.
Psyche comitella, *var.?*
France.

53. Psyche roboricolella.

Mas. *Nigro-fusca, nitens, speciebus quatuor præcedentibus minor; alæ rotundatæ.* Fœmina *præcedentibus obscurior, pilis autem lanuginosis ad partem analem albis.* Involucrum P. intermediellæ *et* P. comitellæ *similis.* Larvæ *color valde obscurus, scutulis nigris; caput nigrum, lineis duabus albo-cinereis.*

Psyche roboricolella, *Bruand, Cat. du Doubs,* 1179; *Monogr. Psych.* 98, 72, pl. 2, f. 72.

Psyche nitidella? *God. Pap. de France. Duponch. Suppl. Hist. Nat. Lep. France.*

——— ———? *Réaum. Ins.* iii. pl. 11, f. 5, 6, 7.

France.

54. Psyche anicanella.

Mas. P. roboricolellæ *affinis, sed obscurior.* Fœmina P. roboricolellæ *similis, pilis analibus niveis.* Involucrum *quisquiliis fragmentisque ligneis indutum.* Larva P. roboricolellæ *similis.*

Psyche anicanella, *Bruand, Cat. du Doubs,* 1180; *Monogr. Psych.* 100, 73, pl. 2, f. 73.

Psyche roboricolella, *var.*?

France. Germany.

55. Psyche salicolella.

Mas. *Statura fere* P. roboricolellæ; *alæ angustiores, paullulo longiores.* Fœmina P. crassiorellæ *et* P. comitellæ *affinis, sed minor.* Involucrum *quisquiliis lignosis vel corticeis indutum.* Larva P. roboricolellæ, *vicina, at multo lucidior.*

Psyche salicolella, *Bruand, Cat. du Doubs,* 1181; *Monogr. Psych.* 100, 74, pl. 2, f. 74.

France.

56. Psyche tabulella.

Mas. P. salicolellæ *valde affinis; color minus obscurum; alæ elongatæ; anticæ integerrimæ, costa arcuatæ, fuscæ, crasse squamosæ, puncto cellulari obscuriore; posticæ vix dilatiores, fimbriis concoloribus; corpus fuscum, fronte concolore; tibiæ posticæ flavescentes.* Fœmina (*sicca*) *luteo-fusca; scutulo fusco lurido; abdomen valde lanatum.* A P. salicolella *vix differt.* Involucrum *breve, oviforme, granis conspersum.* Larva *pallide ochracea, scutulis atris.*

Talæporia tabulella, *Guenée Ann. Soc. Ent. Fr. 2me Sér.* iv. 15.
Psyche clathrella, an nov. sp.? *Bruand, Ann. Soc. Ent.* 1844.
Psyche tabulella, *Bruand, Monogr. Psych.* 102, 75, pl. 2, f. 75.
France.

57. PSYCHE CONSPURCATELLA.

Mas. P. lapidicellæ *valde affinis; alæ paullo angustiores; color anticarum ochreus, nitens, maculis parvis obscurioribus tessellatum; posticæ autem paulisper hyalinæ.*

Psyche conspurcatella, *Kollar, MSS.; Bruand, Monogr. Psych.* 103, 76, pl. 2, f. 76.
Germany.

Sub-div. II.

Alæ magis elongatæ; antennæ ciliatæ, articulis distinctis.

Section I.

Vena transverso areolaris bifurcata.

58. PSYCHE CLATHRELLA.

Mas. *Alæ elongatæ, fusco-cinereæ, costa in medio paulisper excavata; anticæ strigis transversis et venis obscurioribus tessellatæ.* Fœminæ *fere ut apud* P. crasiorellam; *pedes breviores, color nigricans.* Involucrum *magnum, tumidum, molle, subovatum, leviter trigonum.*

Psyche clathrella, *Treits. MSS.; Fischer-v.-Rosl. Abbild. Schmett.* 84, pl. 38, f. 1 a—d. *Bruand, Monogr. Psych.* 103, 77, pl. 2, f. 77.
Talæporia clathrella, *Zeller, Guenée, Ann. Soc. Ent. Fr. 2me Sér.* iv. 14.
Solenobia clathrella, *Duponch. Suppl. Hist. Nat. Lép. France.*
Germany.

59. PSYCHE LICHENELLA.

Mas. P. clathrellæ *affinis; alæ paullo angustiores; color cinereus.* Fœmina *ut apud* P. clathrellam. Involucrum *gracile, valde elongatum, antice et postice acutum.*

Tinea lichenella? *Linn. Faun. Suec.* 1451. *Deg. Ins.* ii. 1, pl. 11, f. 1—3. *Fabr. Sp. Ins.* ii. 306, 94. *Mant. Ins.* ii. 253, 140. *Gmel. ed. Syst. Nat.* iv. 2606, 452.
Talæporia lichenella, *Zeller, Isis.* 1846, 29. *Speyer, Ent. Zeit. Stett.* viii. 18.
Solenobia triquetrella, *Duponch. Suppl. Hist. Nat. Lép. France.*
Talæporia triquetrella, *Guen. Ann. Soc. Ent. Fr. 2me Sér.* iv. 14.
Psyche lichenella, *Bruand, Cat. du Doubs,* 1183; *Monogr. Psych.* 105, 78, pl. 2, f. 78.
Germany.

Section II.

Vena transverso areolaris non bifurcata.

This Section seems to correspond with the first division, and to be closely allied to the *Tineites.*

60. Psyche triquetrella.

Mas. *Cinerea; frons concolor, parte anali albicante; antennæ leviter subciliatæ; alæ anticæ albido-cinereæ, strigis inæqualibus, paullulo obscurioribus tessellatæ, lunula areolari nigricante; posticæ dilute cinereæ.* Fœmina *ut apud* P. lichenellam et crassiorellam; *color cinereo nigricans.* Involucrum *trigonum, breve, molle, in medio tumidum, apice acutum, granis terrosis conspersum.* Larva *cinerea, scutis duobus latis luridis corneis supra segmenta antica; pedes nigricantes.*

Psyche triquetrella, *Zincken, Germar. Mag. Ent.* 5. *Fischer-v.-Rösl.* 87, pl. 39, f. a—r. *Bruand, Cat. du Doubs,* 1184; *Monogr. Psych.* 106, 79, pl. 2, f. 79.
——— ———, *Réaum. Ins. Geoffr. Ins. Par.*
Psyche Lichenum? *Schr.*
Tinea triquetrella, *Hübn. Tin.* 373.
Taleporia triquetrella, *Hübn. Verz. Schmett.* 400, 3868.
Talæporia petrella, *Guenée, Ann. Soc. Ent. Fr. 2me Sér.* iv. 15.
Germany.

61. Psyche inconspicuella.

Mas. P. triquetrellæ *valde affinis; alæ angustiores, lunula discali obscuriore; venis etiam ab illa discrepat.* Fœmina P. triquetrellæ *similis.* Involucrum *minus acutum obscurius.* Larva P. triquetrellæ *affinis.*

Psyche inconspicuella, *Curt.*; *Bruand, Monogr. Psych.* 107, 80, pl. 2, f. 80.

England.

Species incertæ.

62. PSYCHE STIGMATELLA.

Mas. *Fusco-nigra; frons pilosa; alæ fusco hyalinæ, vena costali stigmateque obscurioribus.*

Psyche stigmatella, *Zett. Ins. Lapp.* 928, 1.

Lapland.

63. PSYCHE? LINGULIFORMELLA.

Involucrum *lingulæ formam fingens, papyraceum, fusco-ochreum.* Larva *robusta, brevis, nigrescens; corpus necnon caput parce pilosa.*

Psyche? linguliformella, *Bruand, Monogr. Psych.* 108, 81, pl. 2, f. 81.

Tinea (Cephimallota) angusticostella larva? *Bruand.*

France.

Australia.

64. PSYCHE MACLEAYI.

Mas. *Obscure fusca, gracilis; antennæ usque ad apices pectinatæ; abdomen alas posticas non superans; pedes gracillimi; alæ latæ, breviusculæ.*

Oiketicus Macleayi, *Lansdown Guilding, Trans. Linn. Soc.* XV. *Westw. Proc. Zool. Soc. Lond.* (1854) 222, pl. 34, f. 3.

Male. Dark brown. Body slender. Palpi obsolete? Antennæ pectinated to the tips; branches moderately long. Abdomen extending as far as the hind wings. Legs very slender; hind tibiæ without spurs. Wings broad. Fore wings straight in front, rounded at the tips, oblique along the exterior border; three inferior veins, second as far from the first as from the third; submedian and internal veins united before two-thirds of their length. Length of the body $2\frac{3}{4}$ lines; of the wings 7 lines.

a. Australia. From Mr. Argent's collection.
b. Australia. Presented by J. G. Children, Esq.

65. Psyche Doubledaii.

Mas. *Nigra, sat robusta, cano pilosa; antennæ late pectinatæ, apices versus fere simplices; abdomen apice fasciculatum, alas posticas vix superans; pedes graciles; alæ nudæ, limpidæ, venis albidis.*

Oiketicus Doubledaii, *West. Proc. Zool. Soc. Lond.* (1854) 235, pl. 34, f. 4.

Male. Black, rather stout, partly clothed with hoary hairs Antennæ nearly half the length of the body, deeply pectinated for about two-thirds of the length; almost simple from thence to the tips. Abdomen tufted at the tip, hardly extending beyond the hind wings. Legs slender; hind tibiæ without spurs. Wings bare, colourless, vitreous, quite transparent; veins whitish. Fore wings straight along the costa, rounded at the tips; subcostal vein emitting two branches to the fore border and two to the tip of the wing; three inferior veins; second a little further from the third than from the first, which is forked before half its length. Length of the body 3 lines; of the wings 7 lines.

a. Ceylon. Presented by R. Templeton, Esq.
b, *c*. Ceylon. From Mr. Layard's collection.
d—*g*. Larva-cases. From Mr. Layard's collection.

Genus 3. PSYCHOIDES.

"Bombycidum portus. Antennæ vix breve subciliatæ, articulis distinctis, brevioribus quam apud divisionem præcedentem. Anticæ areola apud areolæ discalis apicem. Larva involucro immoto. (Ad Tineas transit.)"—*Bruand.*

Psychoides, *Bruand*, *Monogr. Psych.* 109, 119.

1. Psychoides Verhuella.

Nigra, nitens, violaceo submicans.

Tinea Verhuella, *Heyden.*
Psychoides Verhuella, *Bruand*, *Monogr. Psych.* 109, pl. 2, f. 82.
Germany.

Genus 4. PSYCHAGRAPHA.

Mas. Corpus sat validum, valde pilosum; palpi breves, porrecti, lanceolati, caput non superantes; articulus 3us acutus, minimus; antennæ breviter pectinatæ, thorace multo breviores. Abdomen apice subfasciculatum. Pedes graciles, brevinsculi. Alæ pilosæ, sat latæ; anticæ apud costam vix convexæ, apice rotundatæ; posticæ abdomen longe superantes.

Male. Body rather stout, very pilose. Palpi short, porrect, lanceolate, not extending beyond the head; third joint acute, very small. Antennæ pectinated, much shorter than the thorax; branches short. Abdomen somewhat tufted at the tip, extending to about half the breadth of the hind wings. Legs rather short and slender; hind tibiæ without spurs? Wings pilose, rather broad. Fore wings hardly convex in front, rounded at the tips; subcostal vein emitting two branches in front; discal areolet divided by a distinct longitudinal vein; three inferior veins; second as far from the first as from the third; third full thrice further from the fourth than from the second.

1. PSYCHAGRAPHA FLOCCOSA.

Mas. *Pallidè fusca; caput, thorax antice et pedes antici obscuriora; abdomen subtus apice albidum; alæ nitentes, sublanuginosæ; anticæ disco nigricantes.*

Male. Pale brown. Head, thorax in front and fore legs dark brown. Abdomen whitish beneath towards the tip. Wings shining, clothed with somewhat woolly hairs. Fore wings blackish about the tip of the discal areolet. Length of the body 3 lines; of the wings 11½ lines.

Amazon district. In Mr. Saunders' collection.

Genus 5. METISA.

Mas. Corpus gracillimum, fere nudum. Antennæ corporis dimidio longiores, usque ad apices latissime pectinatæ. Pedes gracillimi, fere nudi. Alæ latæ, non longæ; anticæ apud costam fere rectæ, apice rotundatæ; posticæ abdomen superantes.

Male. Body very slender, almost bare. Antennæ more than half the length of the body, pectinated to the tips, with about twenty very long pubescent branches. Abdomen not extending so far as the hind wings. Legs very slender, almost bare. Wings

broad, not long. Fore wings nearly straight in front, rounded at the tips; first and second inferior veins united at the base; third about twice further from the second than from the fourth.

1. METISA PLANA.

Mas. *Nigra; alæ parce vestitæ.*

Male. Black. Wings thinly clothed. Length of the body 2 lines; of the wings 6 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Genus 6. PSYCHANISA.

Mas. Corpus vix robustum. Caput et thorax pilosa. Palpi brevissimi. Antennæ usque ad apices breviter pectinatæ, corporis dimidio multo longiores. Abdomen alas posticas superans. Pedes sat robusti; tibiæ posticæ calcaribus quatuor longis. Alæ pilosæ, sat angustæ, non longæ; anticæ apud costam fere rectæ, apice rotundatæ.

Male. Body hardly stout. Head and thorax pilose. Palpi very short. Antennæ pectinated to the tips, much more than half the length of the body; branches pubescent, rather short. Abdomen extending beyond the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings pilose, rather narrow, not long. Fore wings not tapering towards the tips, almost straight in front, rounded at the tips.

Allied to the *Tineites.*

1. PSYCHANISA GUTTATA.

Mas. *Nigra; alæ anticæ guttis nonnullis variis albidis.*

Male. Black. Fore wings with several whitish dots of various size along the costa, and in the disk to two-thirds of the length. Length of the body 3 lines; of the wings 7 lines.

Van Dieman's Land. In Mr. Saunders' collection.

Genus 7. PSEUDOPASA.

Mas. Corpus gracile. Palpi graciles, pilosi, caput vix superantes; articulus 3us exiguus, acutus. Antennæ usque ad apices dense et breviter pectinatæ, corporis dimidio multo longiores. Abdomen alas posticas non superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ opacæ, latæ, non longæ; anticæ apud costam vix convexæ, apice rotundatæ.

Pitane, p., *Cat. Lep. Heteroc.* 531.

This genus seems to be a connecting link between the *Psychidæ* and the *Tineites*.

Male. Body slender. Palpi slender, pilose, hardly extending beyond the head; third joint minute, acute. Antennæ thickly pectinated to the tips, much more than half the length of the body; branches rather short. Abdomen extending as far as the hind wings. Legs rather stout; hind tibiæ with four long spurs. Wings broad, not long, quite opaque. Fore wings hardly convex along the costa, rounded at the tips. *Larva* case-enclosed.

1. PSEUDOPASA DILECTA.

Pitane dilecta, *Cat. Lep. Heteroc.* 532.

Van Dieman's Land.

Genus 8. THYRIDOPTERYX.

Mas. Corpus robustum, densè pilosum. Antennæ latissime pectinatæ, thorace non longiores. Abdomen alas posticas sat longe superans. Pedes pilosi, sat validi. Alæ angustæ, nudæ, limpidæ; anticæ apud costam rectæ, apice rotundatæ; posticæ breves, subtruncatæ. *Fœm.*—Aptera.

Male. Body stout, densely pilose. Antennæ very deeply pectinated, not longer than the thorax; the branches regularly decreasing in length towards the tips. Abdomen extending some distance beyond the hind wings. Legs pilose, rather stout. Wings narrow, bare, quite vitreous and colourless. Fore wings about twice the length of the hind wings, straight along the costa, rounded at the tips; subcostal vein emitting two veins in front; three superior and three inferior veins; discal areolet divided longitudinally by an indistinct secondary vein; second inferior vein more than twice further from the third than from the first. Hind wings slightly truncated, hooked to the fore wings by a long and stout bristle. *Female.*—Wingless.

North America.

1. THYRIDOPTERYX EPHEMERÆFORMIS.

Mas. *Nigra, pilosa; alæ vitreæ, anticæ vitta posticæque margine interiore squamosis.*

Sphinx Ephemeræformis, *Haw. Lep. Brit.* 72.
Ægeria Ephemeræformis, *Steph. Ill. Brit. Ent. Haust.* i. 145.
Thyridopteryx Ephemeræformis, *Steph. Doubleday, on some North American Lepidoptera, Entomologist*, 97. *Gosse, Zool.* ii. 537.

a. United States. Presented by E. Doubleday, Esq.

2. Thyridopteryx Hubneri.

Mas. *Nigra, dense hirta ; antennæ flavæ ; alæ limpidæ venis albidis nigro setosis, posticæ costa basi nigra.* "*Larva obscura, capite segmentisque tribus anticis albidis, nigro punctatissimis, carinis lateralibus carnosis, propedibus dorsoque segmenti ultimi rufo-castaneis. Habitaculum extus subcoriaceum, ramulis numerosissimis tenuibus obsitum, his basi tantum ad fixis apicibus liberis. Pupa* maris *elongata, nigra, nitida, segmentis abdominalibus* 2, 3 *et* 4 *ante apicem apiceque* 5*i serie transversali dorsali spinularum curvatarum, recurvarum instructis,* 6*o inermi,* 7*o et* 8*o ad basim serie transversa spinarum rigidarum postice directa instructis ; tribus ultimis subcoalitis, apicali hamulis duobus minutis, recurvis terminato. Pupa* fœminæ *obesa, nigra, nitida, segmentis* 4 *anticis carinatis, capite parvo, utringue ceratotheca brevi instructo, podothecis minutis, segmentis abdominalibus inermibus, apicali hamulis duobus minoribus recurvis terminato.*"

Oiketicus Hübneri, *Westw. Proc. Zool. Soc.* (1854) 228, pl. 36, f. 1.

a. Sydney. Presented by E. Doubleday, Esq.
b. New Holland. From Mr. Stevens' collection.
c. New Holland.

3. Thyridopteryx Herrichii.

Mas. *Nigra, dense hirta ; caput et thorax anticus cinerascentia ; antennæ obscure fuscæ ; alæ limpidæ, apud costam basi nigricantes, venis albidis.* "*Habitaculum ovale, coriaceum, extus ramulis nullis obtectum, carinis autem sex longitudinalibus elevatis, basi et apice tenuibus haud carinatis.*"

Oiketicus Herrichii, *Westw. Proc. Zool. Soc.* (1854) 232, pl. 37, f. 3.

a. Adelaide. Presented by the Entomological Club.

Genus 9. OIKETICUS.

Mas. Corpus pilosum. Palpi minimi. Antennæ pectinatæ, apices versus serratæ. Abdomen valde elongatum, alas posticas longissime superans. Pedes validi. Alæ pilosæ; anticæ angustæ, longiusculæ, apud costam subrectæ, apice subacuminatæ, margine exteriore perobliquo; posticæ subtruncatæ.

Oiketicus, p., *Lansdown Guilding, Trans. Linn. Soc.* xv. 375. *Westw. Proc. Zool. Soc.* (1844) 219.

Male. Body pilose. Palpi rudimental. Antennæ pectinated, serrated towards the tips, with about forty joints. Abdomen much lengthened, extending for more than half its length beyond the hind wings. Legs stout. Wings pilose. Fore wings long and narrow, almost straight along the costa, slightly acuminated at the tips, extremely oblique along the exterior border; subcostal vein emitting two veins in front; three superior and three inferior veins; second inferior vein much further from the third than from the first, which is forked before one-third of its length; discal areolet subdivided by a longitudinal vein. Hind wings slightly truncated. *Female.*—Wingless.

1. Oiketicus Kirbii.

Mas. *Obscure fusca; alæ anticæ costa plagaque discali pallidioribus.*

Oiketicus Kirbii, *Lansdown Guilding, Trans. Linn. Soc.* xv. 375. *Westw. Proc. Zool. Soc. Lond.* (1854) 221, pl. 134, f. 2.

a. Honduras. From Mr. Dyson's collection.

Genus 10. METURA.

Mas. Corpus robustum. Caput, thorax et abdomen basi densissime hirta. Palpi occulti. Antennæ circiter 40-articulatæ latissime pectinatæ, apice serratæ. Abdomen valde elongatum, alas posticas plus dimidio superans. Pedes validi; femora et tibiæ dense pilosa. Alæ vestitæ, subacuminatæ; anticæ perangustæ, apud costam rectæ, margine exteriore valde obliquo; posticæ apud marginem exteriorem incisæ. *Fœm.*—Aptera.

Oiketicus, p., *Westw.*

Male. Body stout. Head, thorax and base of the abdomen very thickly clothed with hairs. Palpi not apparent. Antennæ with about forty joints, very deeply pectinated, serrated at the tips. Abdomen very long, extending for more than half its length beyond the hind wings, with bands of hairs. Legs stout; femora and tibiæ thickly pilose. Wings slightly acuminated. Fore wings very narrow, straight along the costa, extremely oblique along the exterior border, which is continuous with the interior border; subcostal vein emitting two branches in front; three superior and three inferior veins; third superior vein short; discal areolet divided longitudinally by a secondary vein; second inferior vein full twice further from the third than from the first, which is forked near the base; submedian vein abruptly curved, and united to the internal in the disk of the wing. Hind wings excavated on the exterior border; one superior vein; discal areolet divided by a very distinct forked vein, the fore fork continuous with the superior vein; second inferior vein more than thrice further from the third than from the first, which is forked at one-third of its length; third inferior vein much curved; submedian and internal veins distinct and parallel along the whole length.

1. Metura Saundersii.

Mas. *Nigra; caput et thorax lutea; abdomen fasciis apiceque luteis; alæ apud venas pallidas hyalinæ.* Fœm.—"*Cylindrica, luteo-albida vel faunicolor; caput segmentaque tria antica supra nuda, glabra, reliqua sericea opaca, apicale tomento sericeo obscurius colorato omnino vestitum; antennæ obsoletæ; oviductus elongatus; pedes brevissimi.*"

Oiketicus elongatus, *Saund. Trans. Ent. Soc.* v. 43.
Oiketicus Saundersii, *Westw. Proc. Zool. Soc.* (1854), 223, pl. 35.

Male. Luteous. Antennæ and hind part of the thorax and of the pectus black. Abdomen black towards the base and with black bands. Wings black, limpid along the veins, which are pale testaceous. Length of the body 10—11 lines; of the wings 20—22 lines.

a. Sydney. Presented by E. Doubleday, Esq.
b. Sydney. From Mr. Lambert's collection.

Genus 11. CLANIA.

Mas. Corpus robustum, valde pilosum. Antennæ late pectinatæ, thorace non breviores. Abdomen alas posticas longe superans. Pedes sat graciles; femora et tibiæ dense pilosa. Alæ subpubescentes, semihyalinæ, sat longæ et angustæ; anticæ apud costam rectæ, apice subacuminatæ, margine exteriore perobliquo.

Oiketicus, p., *Westw.*

Male. Body stout, very pilose. Antennæ pectinated, fully as long as the thorax; the branches long towards the base, whence they taper gradually to the tips. Abdomen extending for nearly half its length beyond the hind wings. Legs rather slender; femora and tibiæ thickly pilose. Wings rather long and narrow, thinly pubescent, semihyaline. Fore wings straight along the costa, slightly acuminated at the tips, very oblique along the exterior border; subcostal vein emitting two branches in front; three superior and three inferior veins; third superior vein short; discal areolet divided longitudinally by two secondary veins; second inferior vein as near to the third as to the first, which is forked near its base; submedian and internal veins united in the disk of the wing. Hind wings with the discal areolet divided by a forked longitudinal vein; second inferior vein much further from the third than from the first, which is forked close to the base.

1. Clania Lewinii.

Mas. *Nigricans; caput, thoracis vittæ duæ et abdomen ex parte cano pilosa; alæ semihyalinæ, raro pubescentes, venis nigris.* Fœm.—"*Aptera, crassa, subalbida, obscura; antennæ breves, ex articulatæ; thoracis segmenta glabra, fulva, carinata, 1um subscuculatum; pedes minimi, tuberculiformes.* Habitaculum *elongatum, subcylindricum, extus ramulis fere habitaculi longitudine, longitudinaliter omnino affixis, obtectum.*"

Oiketicus Lewinii, *Westw. Proc. Zool. Soc. Lond.* (1854) 231, pl. 37, f. 1.

Male. Blackish. Head hoary. Thorax with two hoary stripes. Abdomen partly clothed with hoary hairs. Wings semihyaline, thinly pubescent; veins black. Length of the body 5 lines; of the wings 11 lines.

a. b. Sydney. Presented by E. Doubleday, Esq.
c. Sydney. From Mr. Lambert's collection.

Genus 12. EUMETA.

Mas. Corpus pilosum, sat robustum. Antennæ longissime et usque ad apices pectinatæ, thorace longiores. Abdomen alas posticas longe superans. Pedes sat graciles; femora et tibiæ pilosa; tibiæ anticæ appendiculatæ. Alæ vestitæ, opacæ, longiusculæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriore perobliquo.

Male. Body pilose, rather stout. Antennæ pectinated to the tips, longer than the thorax; branches pubescent, very long. Abdomen extending for nearly half its length beyond the hind wings. Legs rather slender; femora and tibiæ pilose; fore tibiæ with a long appendage, which springs from near their base and almost equals them in length. Wings clothed, opaque, rather long. Fore wings hardly convex in front, rounded at the tips, very oblique along the exterior border; interior angle obtuse, well-defined, not rounded; three superior and three inferior veins; first superior vein short; discal areolet with two longitudinal veins; second inferior vein much further from the third than from the first, which is forked near its base; submedian and internal veins united in the disk of the wing.

1. EUMETA CRAMERII.

Mas. *Fuscus; alæ anticæ disco apices versus margineque exteriore nigricantes, vitta discali strigisque exterioribus canis; posticæ obscure fuscæ.* "Habitaculum *larvæ cylindricum, extus ramulis longitudine æqualibus et parallelis arcte applicatis, obtectum.* Pupa *maris obscure castanea, segmentis abdominalibus opacis, valde transverso sulcatis.*"

Oiketicus Cramerii, *Westw. Proc. Zool. Soc. Lond.* (1854) 236, pl. 37, f. 4.

Male. Brown. Fore wings blackish in the disk towards the tips and along the exterior border; a discal stripe and some exterior streaks hoary. Hind wings darker than the fore wings. Length of the body 9 lines; of the wings 18 lines.

a—c. Ceylon. From the Rev. J. Wenham's collection.
d. (Larva-case). Ceylon. From the Rev. J. Wenham's collection.
e, f. (Larva-case). Ceylon. From Mr. Layard's collection.

2. EUMETA TEMPLETONII.

Nigro-purpureus, hirsutus; abdomen obscure fuscum, fasciculis lateralibus; antennæ fuscæ, dimidio basali pectinatæ; pedes antici hirsuti, posteriores tarsique subnudi; alæ anticæ cinereæ elongatæ, striga nigra centrali triangulari, duabusque apicem versus minoribus minusque distinctis in lineam dispositis; posticæ securiformes triangulares concolores.

Oiketicus tertius, *Templeton, Trans. Ent. Soc. Lond.* v. 39, pl. 5, f. 1—5.

Oiketicus Templetonii, *Westw. Proc. Zool. Soc.* (1854) 234, pl. 36, f. 2.

Ceylon.

a. Hong Kong. From Mr. Harrington's collection.

Genus 13. LABEDERA.

Mas. Corpus valde robustum et pilosum. Palpi breves, validi, pilosi, caput vix superantes; articulus 3us minutus, conicus. Antennæ thorace longiores, dimidio apicali late pectinatæ, apices versus subpectinatæ. Abdomen thorace paullo longius, alas posticas vix superans. Pedes validi, pilis longis vestiti; tarsi breviusculi. Alæ semihyalinæ, subpubescentes; anticæ longiusculæ, non latæ, apud costam rectæ, apice rotundatæ, margine exteriore perobliquo; posticæ latiusculæ, subtruncatæ.

Male. Body very stout and pilose. Palpi short, stout, pilose, hardly extending beyond the head; third joint minute, conical. Antennæ longer than the thorax, deeply pectinated to nearly half the length, slightly pectinated from thence to the tips. Abdomen somewhat longer than the thorax, extending very little beyond the hind wings. Legs stout; tarsi rather short, clothed, like the femora and tibiæ, with long hairs. Wings semihyaline, thinly pubescent. Fore wings rather long, not broad, straight along the costa, rounded at the tips, very oblique along the exterior border; three superior and three inferior veins; third superior vein short; first forked at half its length; first and second inferior veins almost contiguous; third remote; submedian and internal veins parallel to each other. Hind wings rather broad, slightly truncated, not more than half the length of the fore wings.

1. LABEDERA HIRTIPES.

Mas. *Nigra; antennæ luteæ; alæ nigricantes, anticè costa basique, posticæ dimidio interiore obscurioribus.*

Male. Black. Antennæ luteous. Wings blackish. Fore wings darkest along the costa and towards the base. Hind wings darkest on nearly half the breadth from the interior border. Length of the body 7 lines; of the wings 15 lines.

a. Brazil. From Mr. Stevens' collection.

Genus 14. PERINA.

Mas. Corpus robustum, pilosum. Palpi obsoleti? Antennæ thorace longiores, latissime pectinatæ, apice simplices. Abdomen alas posticas non superans, subpilosum, apice subfasciculatum. Pedes sat graciles; femora et tibiæ pilosa; tibiæ posticæ calcaribus nullis. Alæ ex parte limpidæ; anticæ sat longæ et angustæ, apud costam fere rectæ, apice vix acuminatæ, margine exteriore perobliquo; posticæ latiusculæ, subtruncatæ.

Male. Body stout, pilose. Palpi obsolete? Antennæ rather longer than the thorax, very deeply pectinated to two-thirds of the length, where the branches become considerably shorter, simple towards the tips. Abdomen not extending beyond the hind wings, thinly pilose, slightly tufted at the tip. Legs rather slender; femora and tibiæ pilose; hind tibiæ without spurs. Wings partly bare and vitreous. Fore wings rather long and narrow, almost straight along the costa, hardly-acuminated at the tips, extremely oblique along the exterior border, which forms a continuous curve with the interior border; subcostal vein emitting two branches; two superior veins, second short; vein intersecting the discal very indistinct, appearing only as a fold; first and second inferior veins united and appearing as one at the base; third full thrice further from the fourth than from the second; submedian vein obsolete; internal vein distinct. Hind wings rather broad, somewhat truncated, about half the length of the fore wings.

1. PERINA BASALIS.

Mas. *Alba; caput, thoracis fascia, pectus antice femoraque lutea; abdomen apice luteo fasciculatum; alæ anticæ limpidæ basi fuscæ aut albæ, posticæ fuscæ aut albæ apice limpidæ.*

Male. Head, pectus in front, femora and a band on the fore part of the thorax luteous. Antennæ white, with brown branches. Thorax with white hairs. Abdomen almost bare, except at the base and beneath, where it is clothed with white hairs; a tuft of luteous hairs at the tip; tibiæ and tarsi whitish. Fore wings bare, limpid, with brown hairs at the base and along part of the interior border. Hind wings with brown hairs, bare and limpid for a space along the apical half of the costa. Length of the body 3—6 lines; of the wings 6—15 lines.

Var. β. Wings partly pale brown.
Var. γ. Wings partly white.

a, b. Nepaul. From Mr. Saunders' collection.
c, d. North India. From Mr. Stevens' collection.
e. Hong Kong. From Mr. Harrington's collection.

Genus 15. LOMERA.

Mas. Corpus robustum, pilosum. Palpi obsoleti. Antennæ thorace non breviores, latissime pectinatæ, apices versus subpectinatæ. Abdomen alas posticas vix superans. Pedes sat graciles; femora et tibiæ pilosa; tibiæ anticæ appendiculatæ. Alæ vestitæ, opacæ, vix latæ, non longæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo.

Male. Body stout, pilose. Head, thorax and abdomen at the base most thickly clothed with hairs. Palpi obsolete? Antennæ as long as the thorax, pectinated to the tips; branches very long, abruptly short towards the tips. Abdomen extending very little beyond the hind wings. Legs rather slender; femora and tibiæ pilose; fore tibiæ with a long appendage. Wings clothed, opaque, hardly broad, not long. Fore wings straight in front, rounded at the tips, oblique along the exterior border; interior angle much rounded; subcostal vein emitting two branches; discal areolet intersected by a distinct vein; three inferior veins; first forked near its base; second as near to the third as to the first. Hind wings more than half the length of the fore wings, not truncated; exterior border forming an almost right angle with the interior border.

1. LOMERA BOISDUVALII?

Mas. *Fulva, dense pilosa; antennæ nigræ; pedes fusci; alæ nigræ, opacæ, basi subfulvæ.* "Habitaculum *elongatum, sensim attenuatum, extus ramulis brevissimis, numerosissimis, omnino affixis obtectum.*"

Oiketicus Boisduvalii? *Westw. Proc. Zool. Soc. Lond.* (1854) 232, pl. 37, f. 2.

Male. Thickly clothed with tawny hairs. Antennæ black. Legs brown. Wings black, opaque, somewhat tawny at the base. Length of the body 4 lines; of the wings 10 lines.

a. ——?

Genus 16. NEMETA.

Mas. Corpus robustum, pilosum. Palpi distincti, breves, ascendentes, caput non superantes. Antennæ usque ad apices mediocriter pectinatæ, thorace vix breviores. Abdomen alas posticas triente superans. Pedes validi, ciliati; tibiæ posticæ calcaribus apicalibus longiusculis. Alæ anticæ valde angustæ, apud costam rectæ, apice rotundatæ, margine exteriore perobliquo; posticæ trigonæ, truncatæ.

Male. Allied to the *Limacodidæ*. Body stout, pilose. Palpi distinct, short, ascending, not extending beyond the head. Antennæ moderately pectinated to the tips, nearly as long as the thorax. Abdomen extending for full one-third of its length beyond the hind wings. Legs stout, ciliated; hind tibiæ with rather long apical spurs. Fore wings very narrow, straight along the costa, rounded at the tips, extremely oblique along the exterior border; interior angle very obtuse; two superior veins; second short; discal areolet intersected by a distinct vein; second inferior vein as far from the first as from the third; third about thrice further from the fourth than from the second; submedian and internal veins slightly converging. Hind wings triangular, about half the length of the fore wings, truncated and slightly excavated along the exterior border.

1. Nemeta bifacies.

Mas. *Ferruginea; caput et palpi albida; antennæ nigræ; abdomen nigrum, apice subtus maculisque duabus dorsalibus testaceis; pedes fulvi, nigro varii; alæ anticæ obscure fuscæ maculis fulvis nigro-cinctis, posticæ subhyalinæ vittis duabus latis nigris.*

Male. Ferruginous. Head and palpi mostly whitish. Antennæ black. Abdomen black, testaceous at the tip beneath, and with two transverse testaceous dorsal marks. Legs tawny, partly clothed with black hairs, which prevail most on the hind pair.

Fore wings dark brown, with three large and some smaller tawny black-bordered spots. Hind wings nearly bare and hyaline, with a black stripe along the costa, and a broader one along the interior border. Length of the body 6½ lines; of the wings 12 lines.

Brazil.

Genus 17. PANISA.

Mas. Corpus robustum, dense pilosum. Palpi breves, validi, porrecti, caput non superantes, articulus 3us conicus, acuminatus. Antennæ usque ad apices pectinatæ, thorace paullo longiores. Abdomen alas posticas triente superans. Pedes validi, pilosi, antici graciles longiusculi; tibiæ posticæ calcaribus longis apicalibus. Alæ vix latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo.

Male. Allied to the *Limacodidæ*. Body stout, densely pilose. Palpi short, stout, porrect, not extending beyond the head; third joint conical, acuminated. Antennæ pectinated to the tips, rather longer than the thorax; the branches moderately deep to beyond half the length. Abdomen extending for about one-third of its length beyond the hind wings. Legs stout, pilose; hind tibiæ with long apical spurs; fore legs rather long and slender. Wings hardly broad. Fore wings straight along the costa, rounded at the tips, oblique along the exterior border; interior angle much rounded; three superior veins; discal areolet intersected by a distinct vein; second inferior vein about thrice further from the third than from the first; third nearly thrice further from the fourth than from the second.

1. PANISA CIRCUMDATA.

Mas. *Ferruginea; antennæ albidæ, basi albæ, ramis ferrugineis; abdomen apice subtus album; pedes albo varii; alæ cinerascentes, semihyalinæ, subpubescentes, marginibus obscurioribus.*

Male. Ferruginous. Antennæ whitish, white at the base; branches ferruginous. Abdomen white at the tip beneath. Legs partly clothed with whitish hairs; tarsi with white bands, or nearly wholly white. Wings grayish, semihyaline, thinly pubescent; costa and ciliæ dark brown. Length of the body 4—5 lines; of the wings 9—11 lines.

a, *b*. New Holland. From Capt. Parry's collection.
c. New South Wales.

Genus 18. CRYPTOTHELEA?

Mas. Corpus pilosum, sat robustum. Caput antice subconicum. Palpi minimi. Antennæ usque ad apices late pectinatæ, thorace paullo longiores. Abdomen alas posticas triente superans. Pedes validi; antici longiusculi; tibiæ anticæ appendiculatæ. Alæ pilosæ, opacæ, sat longæ et angustæ; anticæ apud costam fere rectæ, apice rotundatæ, margine exteriore perobliquo.

Oiketicus (Cryptothelea), *Templeton.*
Oiketicus, p., *Westwood.*

Male. Body rather stout, pilose. Head somewhat prominent in front. Palpi very minute. Antennæ deeply pectinated to the tips, rather longer than the thorax. Abdomen extending for about one-third of its length beyond the abdomen. Legs stout, especially the hind pair; fore legs longer than the others; fore tibiæ with a long appendage. Wings pilose, opaque, rather long and narrow. Fore wings almost straight in front, rounded at the tips, very oblique along the exterior border; three superior and three inferior veins; discal areolet intersected by a secondary longitudinal vein; second inferior vein rather nearer to the third than to the first, which is forked at one-third of its length; submedian and internal veins united in the disk of the wing.

1. CRYPTOTHELEA CONSORTA?

Fusca, hirsuta; antennæ obscure fuscæ, ad apices pectinatæ; abdomen subfuscescens, subnudum, segmentis apicalibus flavis marginibus obscuris; alæ latæ; pedes antici hirsuti, postici subnudi.

Oiketicus (Cryptothelea) consortus, *Templeton, Trans. Ent. Soc. Lond.* v. 40, pl. 5, f. 6, 7.
Oiketicus consortus, *Westw. Proc. Zool. Soc. Lond.* (1854) 235, pl. 36, f. 3.

Male. Brown. Thorax partly testaceous. Abdomen testaceous. Fore wings blackish along the veins, semihyaline in the disks of some of the areolets. Length of the body 5 lines; of the wings 12 lines.

a, *b*. Ceylon. From Mr. Layard's collection.
c. North India. From Mr. Saunders' collection.
d. North India. From Mr. Stevens' collection.

Genus 19. GONOMETA.

Mas. Corpus valde robustum, dense pilosum. Palpi destinati, porrecti, caput non superantes; articulus 2us longus; 3us minutus, conicus. Antennæ thorace multo breviores, usque ad apices pectipatæ, ramis longissimis. Abdomen basi ad apicem attenuatum, alas posticas dimidio superans. Pedes validi, pilosi, antici longiusculi; tibiæ posticæ calcaribus apicalibus minimis. Alæ pilosæ, opacæ; anticæ longæ et angustæ, apud costam rectæ, apice acuminatæ, margine exteriore perobliquo; posticæ truncatæ, subcaudatæ.

Male. Body very stout, thickly pilose. Palpi distinct, porrect, not extending so far as the head; second joint long; third minute, conical. Antennæ much shorter than the thorax, very deeply pectinated, the branches extending to the tips. Abdomen tapering from the base to the tip, extending for full half its length beyond the hind wings. Legs stout, pilose; fore legs much longer than the others; hind tibiæ with very minute apical spurs. Wings pilose, opaque. Fore wings long and narrow, straight along the costa, acuminated at the tips, extremely oblique along the exterior border; interior angle rounded and extremely obtuse; four superior veins; first and second united near the base; a fold intersecting the discal areolet; second inferior vein more than four times further from the third than from the first; third very much further from the fourth than from the second; submedian vein indistinct, not united to the internal. Hind wings truncated, much less than half the length of the fore wings; interior angle produced into a short tail.

This genus and the following much resemble some genera of *Bombycidæ*, such as *Megasoma* and *Borocera*.

1. GONOMETA POSTICA.

Mas. *Ferrugineo-rufa, cyaneo aut purpureo varia; caput antice, pectoris vittæ laterales et coxæ testaceæ; antennæ albæ ramis nigris; abdomen fascia testacea; alæ posticæ apud marginem exteriorem limpidæ.*

Male. Ferruginous red, more or less tinged with a variable blue or purple bloom. Head in front, a stripe on each side of the pectus, and coxæ, testaceous. Antennæ white, with black branches. Thorax with some short testaceous dorsal streaks which are occasionally obsolete. Abdomen with a broad testaceous band at two-

thirds of the length. Hind wings limpid almost of the exterior border. Length of the body 12 lines; of the wings 28 lines.

a, *b*. Port Natal. From M. Gueinzius' collection.
c. Zoolu Country. Presented by G. F. Angas, Esq.
d. South Africa. From Mr. Argent's collection.

Genus 20. ENTOMETA.

Mas. Corpus robustum, valde pilosum. Caput subprominens. Palpi pilosi, valde robusti, caput paullo superantes; articulus 3us minutus, conicus. Antennæ usque ad apices latissime pectinatæ, thorace longiores. Abdomen alas posticas plus minusve superans. Pedes validi, pilosi; tibiæ posticæ calcaribus minutis apicalibus. Alæ pilosæ, opacæ; anticæ longiusculæ, apices versus angustæ, apud costam rectæ, apice rotundatæ, margine exteriore perobliquo et subexcavato.

Male. Body stout, very pilose. Head a little prominent. Palpi very stout, pilose, projecting a little beyond the head; third joint minute, conical. Antennæ very deeply pectinated to the tips, longer than the thorax. Abdomen extending more or less beyond the hind wings. Legs stout, pilose; hind tibiæ with minute apical spurs. Wings pilose, opaque. Fore wings rather long, narrow towards the tips, straight along the costa, rounded at the tips; exterior border slightly excavated and very oblique; interior angle much rounded and very obtuse.

A. Alæ posticæ margine exteriore subexcavato. marginata, *Walk*.
B. Alæ posticæ margine exteriore vix excavato.
A. Alæ anticæ sat angustæ. - - - - obliqua, *Walk*.
B. Alæ anticæ perangustæ. - - - - divisa, *Walk*.
C. Alæ anticæ breviusculæ. - - - punctigera, *Walk*.

1. Entometa marginata.

Mas. *Ferruginea; antennæ purpurascentes, ramis fuscis; abdomen nigro-fuscum, subtus apice testaceum; alæ anticæ disco subtus luteo; posticæ nigro-fuscæ, apud marginem posticum luteæ.*

Male. Ferruginous. Antennæ with a purple tinge; branches brown. Abdomen blackish brown, testaceous at the tip beneath, extending for one-fourth of its length beyond the hind wings. Fore

wings luteous in the disk beneath. Hind wings blackish brown, luteous along the hind border. Length of the body 10 lines; of the wings 24 lines.

a. Van Dieman's Land. Presented by Morton Allport, Esq.
b. Van Dieman's Land. From Mr. A. J. Smith's collection.

2. ENTOMETA OBLIQUA.

Mas. *Pallide fusca; palpi subtus albidi; abdomen ferrugineum, apicem versus obscure fuscum; tarsi nigri, albo fasciati; alæ anticæ albido conspersæ, lunula discali parva alba, plaga basali nigra, fasciaque perobliqua e guttis fulvo-nigris; posticæ nigro-fuscæ, postice luteæ.*

Male. Pale brown. Palpi whitish beneath. Antennæ with black branches. Abdomen ferruginous, dark brown towards the tip, extending for one-fourth of its length beyond the hind wings. Tarsi black, with white bands. Fore wings with whitish flecks, with a little white discal lunule, with a black mark on the inner border near the base, and with a very oblique row of black partly tawny-bordered dots near the exterior border; disk beneath luteous. Hind wings blackish brown; hinder half mostly luteous. Length of the body 8—9 lines; of the wings 16—18 lines.

a, *b*. New Holland. Presented by H. G. Harrington, Esq.
c. New Holland. From Mr. Argent's collection.
d, *e*. Van Dieman's Land. Presented by W. C. Hewitson, Esq.

3. ENTOMETA DIVISA.

Mas. *Fusca; abdomen apice nigricans; tarsi nigricantes, albo fasciati; alæ anticæ antice ferrugineæ, postice canæ, albo bimaculatæ guttisque nonnullis nigris ex parte fulvo marginatis; posticæ ferrugineæ, antice fuscæ.*

Male. Brown. Antennæ with black branches. Abdomen pale brown, blackish at the tip, extending for half its length beyond the hind wings. Tarsi blackish, with white bands. Fore wings dark brown, ferruginous along the costa, with a white mark on the costa at four-fifths of the length, with a white discal spot, and with a few black partly luteous-bordered dots along the hinder half of the exterior border; hinder half mostly hoary, which colour is divided from the brown by a deeply undulating line. Hind wings ferruginous, dark brown in front. Length of the body 7 lines; of the wings 14 lines.

a. New Holland. Presented by H. G. Harrington, Esq.

4. ENTOMETA PUNCTIGERA.

Mas. *Pallide fusca, pilis nonnullis albis; caput album, antice fuscum; abdomen apice subtus album; alæ anticæ fasciis nonnullis linearibus obliquis undulosis albis, plaga basali nigricante, guttisque nonnullis discalibus et exterioribus nigris; posticæ albo ciliatæ.*

Male. Pale brown, with some white hairs. Head white, brown about the palpi, which are partly white beneath. Antennæ with dark brown branches. Abdomen white at the tip beneath, extending a little beyond the hind wings. Fore wings with four or five slender oblique undulating partly interrupted white bands, with a large blackish basal spot, with three discal black dots, and with a row of black dots along the exterior border. Hind wings with a white fringe. Length of the body 6 lines; of the wings 11 lines.

a. New Holland. Presented by H. G. Harrington, Esq.

Genus 21. PEROPHORA.

Mas et fœm. Corpus crassum. Proboscis obsoleta. Palpi breves, validi, porrecti, pilosi, caput non superantes; articulus 3us minutus, conicus. Antennæ pectinatæ, basi approximatæ, 44-articulatæ, articulo 1o incrassato porrecto, cæteris divaricatis, a 1o ad 11um ramulis longitudine sensim crescentibus, inde ad 25um sensim decrescentibus, cæteris paribus brevissimis, omnibus ciliatis. Abdomen alas posticas superans. Pedes breviusculi; tibiæ posticæ calcaribus apicalibus minimis. Alæ sat longæ, non latæ; anticæ subfalcatæ. *Mas.*—Antennæ late pectinatæ, thorace non breviores. Abdomen apice bifurcatum. *Fœm.*—Antennæ mediocriter pectinatæ, thorace breviores. Abdomen apice acuminatum. *Larva* involucro mobili foliis constructo vitam deget.

Saccophora, *Harris. Doubleday, on some North American Lepidoptera, Entomologist*, 99.

Perophora, *Harris, Ins. inj. to Vegetat.* Ed. i. 299; Ed. ii. 319. *Newm. Trans. Ent. Soc. Lond. New Series*, iii. 1.

Male and fem. Body stout, thickly clothed with short closely-lying hairs. Proboscis obsolete. Palpi short, stout, pilose, porrect, not extending beyond the head; third joint minute, conical. Antennæ pectinated to the tips. Abdomen extending beyond the hind wings. Legs rather short; femora and tibiæ thickly pilose; hind tibiæ with very minute apical spurs. Wings rather long, hardly broad, thickly clothed, opaque. Fore wings nearly straight along

the costa, slightly hooked and acuminated at the tips, oblique and undulating along the exterior border; discal areolet intersected by a distinct vein; three inferior veins; first and second approximate at the base; third remote. *Male.*—Antennæ deeply pectinated, as long as the thorax. Abdomen extending for more than one-third of its length beyond the hind wings, with two long and stout tufts at its tip. *Female.*—Antennæ moderately pectinated, shorter than the thorax. Abdomen extending for less than one-third of its length beyond the hind wings, acuminated at the tip.

Resembles the genus *Dryocampa*.

1. Perophora Melsheimerii.

Tota pallide rubro-cinerea vel isabellina; alæ punctis minutis nigris undique irroratæ, fascia lineari fusca communi obliqua ante anticarum apicem retrorsum angulata, punctoque majore nigricante mediano signatæ.

Saccophora Melsheimeri, *Harris. Doubleday, Entomologist*, 101.
Perophora Melsheimerii, *Harris, Ins. inj. to Vegetat.* Ed. i. 299; Ed. ii. 319. *Newman, Trans. Ent. Soc. Lond. New Series*, iii. 1.

Massachusetts. Virginia.

2. Perophora Batesii.

Tota testacea; alæ punctis irroratæ, fascia lineari saturatiori communi obliqua ante apicarum apicem retrorsum angulata lunulaque aperta centrali signatæ.

Perophora Batesii, *Newman, Trans. Ent. Soc. Lond. New Series*, iii. 1.

a—c. Santarem. From Mr. Bates' collection.
d—f. (Pupa-case). Santarem. From Mr. Bates' collection.

3. Perophora hamata.

Mas. *Ferruginea, albido conspersa; antennæ [illegible] fascia obliqua nigricante cinereo margina[illegible] striga obliqua antica maculaque discali cine[illegible]*

Male. Ferruginous, with some whitish bl[illegible] which are most prevalent on the under side of [illegible] Antennæ blackish. Wings with a blackish ban[illegible]

from the tips of the fore wings to rather beyond the middle of the interior border of the hind wings; it is accompanied on its outer side by a gray band, which widens irregularly from towards the tips of the fore wings to the interior border of the hind wings. Fore wings much more falcate than those of *P. Batesii*; the gray band appearing on the inner side of the hooked part, and emitting an oblique band to the costa; a gray discal spot. Length of the body 9 lines; of the wings 22 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

ADDENDA TO THE PSYCHIDÆ.

Psyche Helix.

Mas. "*Totus niger opacus; corpus nigro pilosum, ante lineis tenuibus; alæ nigræ, decumbente pubescentes.* Folliculus *fusco-cinereus, scabridus, ter spiraliter contortus, spiris arcte contiguis, ut a latere visus formam ovoideo-conicam offerat.* Pupa *pallida, tenuiter membranacea, nitida.*"

Psyche Helix, *Siebold, Jahresbericht der Schleis Gesellsch fuer Vaterl. Kultur*, 1850, 54. *Nylander, Ann. Soc. Fnt. Fr.* 3me *Sér.* ii. 335.

Germany.

Newman, Printer, 9, Devonshire Street, Bishopsgate.

LIST

OF THE

SPECIMENS

OF

LEPIDOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

BY

FRANCIS WAL[redacted], F.L.S.

PART V.—LEPIDOPTERA HETEROCERA.

PRINTED BY ORDER OF THE TRUSTEES.
LONDON, 1855.

LONDON:
PRINTED BY EDWARD NEWMAN,
9, DEVONSHIRE STREET, BISHOPSGATE.

INTRODUCTION.

THE principal object of the present Catalogue has been to give a complete list of the specimens of Lepidopterous Insects contained in the collection of the British Museum, indicating at the same time the peculiarities of each, as regards variation of character, locality, and the source from whence it has been derived. With this view, the different individuals of each species contained in the collection are indicated by the letters *a*, *b*, *c*, &c., following the name of the species and its synonymes, and the description, if it appeared to have been before undescribed.

The continuation is in hand, and will follow as soon as it is completed.

JOHN EDWARD GRAY.

British Museum,
October, 1855.

CATALOGUE

OF

LEPIDOPTERA HETEROCERA.

PART V.

Fam. 5. NOTODONTIDÆ.

Habitus non geometriformis. Corpus sæpissime crassum. Proboscis sæpissime nulla aut brevissima, nonnunquam sat longa. Palpi sæpissime mediocriter longi, raro longissimi. Antennæ mediocres, setaceæ, *maris* sæpissime pectinatæ rarissime simplices, *fœminæ* simplices raro subpectinatæ. Alæ deflexæ, integræ, sæpissime longiusculæ; vena submediana alarum posticarum in angulum ani excurrens.

Notodontidæ, *Steph. Ill. Brit. Ent. Haust.* ii. 10; *Herr.-Schæff.*
Dicranuridæ et Pygærides, *Duponch.*
Bombycini, p., *Boisd.*
Pseudobombycini, *Boisd.*
Arctiidæ, p., *Steph.*
Phalænina Notodontites, *Newm. Ent. Mag.* ii. 383.
Sub-fam. Pygæridi et Dicranuridi, *Steph. Cat. Brit. Lep.* 37, 38.

Synopsis of Genera.

A. *Tarsi nudi aut breviter pilosi.*
A. Tibiæ bicalcaratæ.
a. Antennæ *maris* usque ad apices pectinatæ.
a. Antennæ *maris* non latissime pectinatæ.
i. Thorax muticus.
* Alæ longiusculæ.
† Abdomen alas posticas longe superans.
‡ Antennæ *maris* corporis dimidio non longiores.
§ Caput non fasciculatum.
× Antennæ *fœminæ* pectinatæ.
1. CERURA.
×× Antennæ *fœminæ* simplices.
4. DESTOLMIA.
§§ Caput utrinque fasciculatum.
5. CECRITA.
‡‡ Antennæ *maris* corporis dimidio multo longiores.
75. ZAGARIS.
†† Abdomen alas posticas paullo superans.
‡ Antennæ *maris* dimidio basali late pectinatæ.
6. CLAPHE.
‡‡ Antennæ *maris* totæ mediocriter pectinatæ.
7. CLATHE.
††† Abdomen alas posticas non superans.
‡ Palpi caput non superantes.
§ Alæ anticæ margine exteriore subobliquo.
32. GLUPHISIA.
§§ Alæ anticæ margine exteriore sat obliquo.
18. XENIARA.
§§§ Alæ anticæ margine exteriore perobliquo.
15. NADIASA.
‡‡ Palpi caput superantes. - - 21. LISTOCA.
** Alæ latiusculæ aut breviusculæ.
† Abdomen alas posticas non superans.
‡ Alæ sat latæ.
§ Tibiæ posticæ calcaribus sat longis.
× Alæ anticæ angulo interiore non rotundato. - - - 50. SETORA.
×× Alæ anticæ angulo interiore rotundato.
45. TERAGRA.
§§ Tibiæ posticæ calcaribus minutis.

× Antennæ *maris* mediocriter pectinatæ.
52. CHILENA.

×× Antennæ *maris* breviter pectinatæ.

0 Antennæ *fœminæ* subpectinatæ.
33. CNETHOCAMPA.

00 Antennæ *fœminæ* simplices.

— Palpi caput superantes.
49. THOSEA.

= Palpi caput non superantes.
42. COLOCASIA.

‡‡ Alæ angustæ.

†† Abdomen alas posticas superans. 46. SOREMA.

ii. Thorax scapulis elevatis.

* Alæ anticæ margine exteriore valde obliquo.
2. HOPLITIS.

** Alæ anticæ margine exteriore subobliquo.
41. ICHTHYURA.

b. Antennæ *maris* latissime pectinatæ.

i. Palpi occulti. - - - - 76. PTILOPHORA.

ii. Palpi conspicui. - - - - 74. INOUS.

B. Antennæ *maris* pectinatæ, apices versus nudæ.

a. Antennæ *maris* latissime pectinatæ. - 35. DAMATA.

b. Antennæ *maris* non latissime pectinatæ.

i. Alæ anticæ tuberculis elevatis. - 20. STAUROPUS.

ii. Alæ anticæ non tuberculatæ.

* Antennæ *maris* bistriente pectinatæ.

† Alæ sat angustæ.

‡ Abdomen alas posticas vix superans.
25. THLACIDAS.

‡‡ Abdomen alas posticas longe superans.
53. XULORA.

†† Alæ latiusculæ.

** Antennæ *maris* dimidio pectinatæ. - 54. LAMNIS.

*** Antennæ *maris* triente pectinatæ. - 55. SURETA.

B. *Tibiæ quadricalcaratæ.*

A. Alæ anticæ margine interno dentato.

a. Alæ anticæ margine externo denticulato.

i. Palpi non longi.

* Palpi caput superantes.

† Alæ angustæ. - - - 19. ANODONTA.

†† Alæ latæ. - - - - - 37. NAPREPA.

** Palpi caput non superantes.

† Antennæ *maris* serratæ. - 12. LOPHOPTERYX.

†† Antennæ *maris* pectinatæ.

‡ Thorax cristatus.
§ Alæ anticæ margine interiore excavato.
13. SPATALIA.
§§ Alæ anticæ margine interiore non excavato.
29. SORAMA.
‡‡ Thorax non cristatus.
§ Tarsi graciles.
× Alæ anticæ margine exteriore perobliquo. - 10. OCHROSTIGMA.
×× Alæ anticæ margine exteriore subobliquo.
0 Antennæ *fœminæ* simplices.
8. NOTODONTA.
00 Antennæ *fœminæ* subpectinatæ.
9. PHEOSIA.
§§ Tarsi validi. - - - - 73. ALPIS.
ii. Palpi longi. - - - - - - 27. MOSARA.
iii. Palpi longissimi. - - - 11. PTEROSTOMA.
b. Alæ anticæ margine externo non denticulato.
i. Tibiæ posticæ calcaribus longiusculis.
* Antennæ *maris* usque ad apices pectinatæ.
† Abdomen alas posticas superans. - 47. ROSAMA.
†† Abdomen alas posticas non superans. 71. APELA.
** Antennæ *maris* pectinatæ, apice nudæ.
23. HETEROCAMPA.
ii. Tibiæ posticæ calcaribus parvis. - 14. DRYMONIA.
B. Alæ anticæ margine interno non dentato.
a. Alæ anticæ margine exteriore denticulato.
i. Alæ longiusculæ.
* Alæ anticæ margine exteriore valde obliquo.
† Abdomen alas posticas paullo superans.
16. CETOLA.
†† Abdomen alas posticas longe superans.
36. HYLEORA.
** Alæ anticæ margine exteriore subobliquo.
39. PHALERA.
ii. Alæ latiusculæ.
* Thorax non cristatus. - - - 43. DATANA.
** Thorax cristatus. - - - - 44. NADATA.
b. Alæ anticæ margine exteriore non denticulato.
i. Alæ anticæ subfalcatæ.
* Alæ maculis vitreis. - - - 69. PARATHYRIS.
** Alæ maculis nullis vitreis. - - 70. ANTICYRA.
ii. Alæ anticæ non falcatæ.
* Palpi *maris* caput superantes.

† Palpi graciles.
‡ Antennæ *maris* usque ad apices pectinatæ.
§ Corpus robustum. - - - 62. EPISEMA.
§§ Corpus sat gracile.
× Abdomen alas posticas vix superans.
57. RILIA.
×× Abdomen alas posticas paullo superans.
0 Alæ non longiusculæ. - 17. RAMESA.
00 Alæ longiusculæ. - 51. NIODA.
××× Abdomen alas posticas longe superans.
0 Alæ costa convexæ. - 59. TIFAMA.
00 Alæ costa recta aut subrecta.
58. NERICE.
‡‡ Antennæ *maris* apices versus nudæ.
§ Palpi brevissimi. - - 24. EXÆRETA.
§§ Palpi longiusculi. - - 22. PEROMA.
†† Palpi validi.
‡ Alæ anticæ apud costam convexæ.
§ Antennæ *maris* usque ad apices pectinatæ.
× Abdomen alas posticas superans.
38. ANEUROCAMPA.
×× Abdomen alas posticas non superans.
61. NOLEOA.
§§ Antennæ *maris* apices versus nudæ.
48. LUSURA.
‡‡ Alæ anticæ apud costam vix convexæ.
63. RIPISA.
‡‡‡ Alæ anticæ apud costam rectæ.
§ Antennæ *maris* latissime pectinatæ.
56. DEDIAMA.
§§ Antennæ *maris* mediocriter pectinatæ.
× Alæ sat angustæ.
0 Antennæ *maris* ad apices pectinatæ.
30. BRACHIONYCHA.
00 Antennæ *maris* non ad apices pectinatæ.
26. EDEMA.
×× Alæ sat latæ. - - 64. NEMETA.
** Palpi caput vix superantes.
† Alæ longiusculæ. - - - - 28. NEOLA.
†† Alæ breviusculæ. - - - - 31. CLEAPA.
*** Palpi *maris* caput non superantes.
† Antennæ *maris* simplices. - - 60. RIGEMA.
†† Antennæ *maris* subpectinatæ. - 65. DOCYNA.
††† Antennæ *maris* mediocriter pectinatæ.

‡ Palpi brevissimi. - - - 72. ANZABE.
‡‡ Palpi breves.
§ Proboscis non conspicua. - 34. RETHONA.
§§ Proboscis conspicua. - - 3. TADANA.
‡‡‡ Palpi mediocriter longi.
§ Antennæ apices versus nudæ. 40. DANIMA.
§§ Antennæ usque ad apices pectinatæ.
× Proboscis brevissima. - 67. LAGELA.
×× Proboscis longa. - - 68. SIDANA.
†††† Antennæ *maris* latissime pectinatæ.
‡ Antennæ thorace non longiores. 66. SANEGA.
‡‡ Antennæ thorace multo longiores.
77. PTILOMACRA.
B. Tarsi longe pilosi. - - - - - - 78. CLAMARA.

Genus 1. CERURA.

Corpus crassum, pilosum. Ocelli nulli. Proboscis brevissima. Palpi brevissimi, porrecti, caput non superantes; articulus 3us minimus. Antennæ usque ad apices pectinatæ, thorace longiores. Abdomen alas posticas superans. Pedes validi, pilosi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ læves, longiusculæ; anticæ areola appendiculari, apud costam fere rectæ, apice rotundatæ, margine exteriore perobliquo.

Cerura, p., *Schr.*
Cerura, *Steph. Ill. Brit. Ent. Haust.* ii. 15.
Phalæna, p., *Deg.*
Bombyx, p., *Linn.; Fabr.; Gmel.; Esp.; Borkh.; Hübn.; Haw.; God.*
Dicranura, *Latr.; Boisd.*
Harpyia, p., *Ochs.*
Harpyia et Harpyias, *Hübner.*
Pania, *Dalm.*
Furcula, *Lamarck.*

Body stout, pilose. Proboscis very short. Palpi very short, not extending so far as the head; third joint very small. Antennæ pectinated to the tips, longer than the thorax. Abdomen extending beyond the hind wings. Legs stout, pilose; hind tibiæ with two minute apical spurs. Wings rather long. Fore wings almost straight along the costa, rounded at the tips, very oblique along the exterior border; interior angle much rounded; discal areolet intersected by a secondary forked vein; three inferior veins; second about four times further from the third than from the first.

Europe.

A. Nivea, maculis chalybeis nonnullisque aurantiacis.
Verbasci, *Fabr.*

B. Albidæ aut cinereæ, nigro et aurantiaco signatæ.
A. Albida; thoracis dorsum aurantiacum, fasciis quatuor transversis nigris; fascia alarum anticarum fusca, utrinque irregularis. - - - - - bicuspis, *Borkh.*
B. Cinereæ; thoracis dorsum irregulariter aurantiaco et nigro variegatum; fascia alarum anticarum fusca, basim versus linea recta terminata.
A. Fascia media limbum versus arcu magno nigerrimo terminata; linea transversa posterior duplex. bifida, *Borkh.*
B. Fascia media limbum versus irregulariter terminata, linea transversa posterior triplex. - - furcula, *Linn.*
c. Unicolores, albidæ aut nigricantes, lineis acutissimis dentatis.
A. Nivea, abdominis dorsum nigrum, vitta media et apice late albis, hoc lineis quatuor longitudinalibus tenuibus nigris.
erminea, *Esp.*
B. Cinerascens; abdominis striga dorsalis subcatenulata seriesque macularum nigrarum lateralis. - vinula, *Linn.*
C. Nigricans; abdominis dorsum nigrum, margine omni et in mare vittis tribus longitudinalibus albis.
Phantoma, *Dalm.*

1. Cerura Verbasci.

Alba; thoracis discus abdominisque fasciæ nigra; alæ anticæ plaga costali subapicali, striga postica furcata guttisque nonnullis nigris.

Cossus Verbasci, *Fabr. Suppl.* 61, 63.
Bombyx Verbasci, *God. Lép. France*, iv. 70, 39, pl. 16, f. 1.
Dicranura Verbasci, *Boisd.*
Harpyia Verbasci, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 118, 8, 1.

a—*c*. Europe. From M. Becker's collection.

2. Cerura bicuspis.

Alæ niveæ; anticæ basi margineque postico nigro punctatæ, fascia transversa utrinque subsinuata cinerea; thorax antice albus.

——— ———, *Pap. d'Eur.* v. 132, pl. 206, f. 273.
Cerura bicuspis, *Steph. Ill. Brit. Ent. Haust.* ii. 16, 1, pl. 13, f. 3. *Westw. & Humph. B.M.* i. pl. 15, f. 2.

Bombyx bicuspis, *Borkh. Eur. Schmett.* iii. 380, 141. *Brahm. Ins. Kal.* 275, 165. *Schwarz. Raup.* 255. *Hübn. Bomb.* 112, 4, pl. 10, f. 36.

Harypia bicuspis, *Ochs. Schmett. von Eur.* iii. 26, 3. *Fischer, Entom. Ruth.* 63, 2, pl. 3, f. 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 118, 9, 2.

Harpyias bicuspis, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Andriæ Dislineatæ*), 148, 1562.

Dicranura bicuspis, *Boisd.*

a. Europe. Presented by the Entomological Club.
b, *c*. Europe. From Mr. Milne's collection.

3. Cerura bifida.

Alæ albidæ, anticæ basi margineque postico nigro punctatæ, fascia transversa cinerea nigro marginata; posticæ fimbria fusca; thorax subcinereus, nigro-flavoque transversim striatus.

Cerura bifida, *Steph. Ill. Brit. Ent. Haust.* ii. 19, 7, pl. 15, f. 2. *Fischer, Entom. Ruth.* 65, 3, pl. 2, f. 3. *Westw. & Humph. B.M.* ii. pl. 15, f. 8, 9.

——— ———, *Pap. d'Eur.* v. 135, pl. 206, f. 273

Bombyx bifida, *Borkh. Eur. Schmett.* iii. 374, 139. *Rhein. Mag.* i. 387, 256. *Brahm. Ins. Kal.* 275, 164. *Fuessl. N. Mag.* iii. 2, 161. *Schwarz. Raup.* 250, 390, 529, 663. *Hübn. Bomb.* 112, 156, pl. 10, f. 37, 38. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* E. b. f. 1 a; 2 b.

Bombyx furcula, *Esp. Schmett.* iii. 102, pl. 19, f. 6. *Wien. Verz.* 64. *Fam. S.* 4. *Illig. N. Auss. Dess.* i. 150, 4.

Harpyia bifida, *Ochs. Schmett. von Eur.* iii. 29, 4. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 118, 10, 3.

Harpyias bifida, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Andriæ Dislineatæ*), 148, 1561.

Dicranura bifida, *Boisd.*

Var. β. *Alæ albidæ, anticæ basi margineque postico nigro punctatæ, fascia transversa utringue nigro marginata cinerea; thorax cinereus, fasciis transversis nigris.*

Cerura integra, *Steph. Ill. Brit. Ent. Haust.* ii. 16, 2, pl. 15, f. 3.

Var. γ. *Alæ cancæ, anticæ basi margineque postico nigro punctatæ, fascia transversa angusta cinerea nigro marginata, strigaque postica flexuosa arcuorum nigrorum; thorax antice cinereus.*

Cerura arcuata, *Steph. Ill. Brit. Ent. Haust.* ii. 17, 4.
Harpyia forficula? *Zetter, Fisch. Ent. Russ.* i. 62, pl. 3, f. 1. *Alæ subcinereæ; anticæ apice nigro punctatæ; fascia media subæquali subcinerea flavo et nigro cincta.*

Var. δ. *Alæ albidæ, anticæ basi margineque postico nigro punctatæ, fascia transversa lata cinereo-fusca nigro marginata; thorax cæruleoater luteo fasciatus, antice cinereus.*

Cerura latifascia, *Curt. Brit. Ent.* iv. pl. 193. *Steph. Ill. Brit. Ent. Haust.* ii. 18, 5.

Var. ε. *Alæ albidæ, anticæ basi margineque postico nigro punctatæ, fascia transversa cinerea extus reparida; prothorax subcinereus.*

Bombyx fuscinula, *Hübn. Bomb.* pl. 10, f. 37.
Cerura fuscinula, *Steph. Ill. Brit. Ent. Haust.* ii. 18, 6, pl. 15, f. 1.
Dicranura fuscinula, *Boisd.*

a—p. England. From Mr. Stephens' collection.
q—s. England.
t, v. Europe. From M. Becker's collection.

Var.? *Albida; palpi et antennæ nigra; thorax niger, antice albidus; abdomen nigrum; alæ anticæ guttis plurimis fasciisque duabus latis nigris; posticæ gutta discali nigra.*

Whitish. Palpi and antennæ black. Thorax, except in front, and abdomen black. Fore wings with several black dots, and with two broad black bands, the first concave on each side, the second widely interrupted. Hind wings with a black discal dot. Length of the body 6 lines; of the wings 16 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

4. Cerura furcula.

Alæ cinereæ, anticæ basi margineque postico nigro punctatæ, fascia transversa subangusta luteo-fusca, extus flexuosa; thorax variegatus, antice cinereus.

Cerura furcula, *Schr. Faun. Boic.* ii. 292. *Steph. Ill. Brit. Ent. Haust.* ii. 17, 3. *Fischer, Entom. Ruth.* 66, 4, pl. 3, f. 4.
——— ———, *Pap. d'Eur.* v. 132, pl. 206, f. 273. *Westw. & Humph. B.M.* i. 74, pl 15, f. 4, 5. *Harr. Engl. Ins.* pl. 4, f. 9.
Phalæna, &c., *Deg. Gen.* 38, 54.

Bombyx furcula, *Linn. Syst. Nat.* i. 2, 823, 5, 1. *Faun. Suec.* 1122. *Fabr. Sp. Ins.* ii. 201, 33; *Mant. Ins.* ii. 130, 186. *Ent. Syst.* iii. 1, 475, 213. *Gmel. ed. Syst. Nat.* i. 5, 2426, 51. *Clerck, Icon.* pl. 9, f. 9. *Sepp. Ins.* iv. 29, pl. 6, f. 1—8. *Naturforscher*, xiv. 63, pl. 2, f. 13. *Oliv. Enc. Méth.* v. 97, 246. *Donov. Nat. Hist. Brit. Ins.* viii. 55, pl. 272. *Stew. El. Nat. Hist.* ii. 151. *Turt. Syst. Nat.* iii. 226. *Hübn. Bomb.* 112, 7, pl. 10, f. 39. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* E. b. f. 2 a. *God. Lép. France*, iv. 166, pl. 16, f. 2, 3.

Phalæna furcula, *Wilkes*, 13, pl. 29, f. 2.

Bombyx furculus, *Haw. Lep. Brit.* 103.

Harpyia furcula, *Ochs. Eur. Schmett.* iii. 32, 5. *Zett. Ins. Lapp.* 922, 4. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 118, 11, 4.

Dicranura furcula, *Boisd.*

Harpyias furcula, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Andriæ Dislineatæ*) 148, 1560.

Furcula Salicis, *Lam. Invert.* iii. 582.

Var.? *Alæ anticæ cinereæ, punctis strigisque fuscis dentatis fasciisque obscurioribus; posticæ fuscæ.*

Harpyia arctica, *Dalm. MSS. Zett. Ins Lapp.* 922, 3.

Lapland.

a—m. England. From Mr. Stephens' collection.

n, o. England.

p, q. Europe. From M. Becker's collection.

r. Europe. From Mr. Milne's collection.

s, t. Germany.

5. Cerura erminea.

Alæ niveæ, anticæ punctis strigisque fuscis dentatis; thorax niveus, nigro maculatus; abdomen nigro punctatum.

Cerura erminea, *Steph. Ill. Brit. Ent. Haust.* ii. 20, 9.

Bombyx erminea, *Esp. Schmett. Hübn. Bomb.* pl. 9, f. 26. *God. Lép. de France*, iv. 164, pl. 15, f. 4.

Bombyx Vinula, *var.* β, *Gmel. ed. Syst. Nat.* i. 5, 2413.

Harpyia erminea, *Ochs. Schmett. von Eur.* iii. 24. *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Andriæ Dislineatæ*) 148, 1558. *Herr.-Schaff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 119, 12, 5.

Dicranura erminea, *Boisd.*

a—d. Europe. From M. Becker's collection.

e, f. Europe.

6. Cerura vinula.

Alæ anticæ albæ, punctis strigisque fuscis repandis dentatisque; corpus album, nigro maculatum.

Cerura vinula, *Schr. Faun. Boic.* ii. 191. *Steph. Ill. Brit. Ent. Haust.* ii. 19, 8. *Westw. & Humph. B.M.* i. 77, pl. 5.

——— ———, *Aldrov. Ins.* 268, 1, 8. *Mouff.* 183, 10. *Rai. Ins.* 153, 3, 5. *Albin, Ins.* ii. pl. 5. *Reaum. Ins.* ii. pl. 21. *Merian, Ins. Eur.* pl. 13, g. f. 140, *Frisch. Ins.* vi. pl. 8. *Roës. Ins.* i. 2, pl. 19. *Geoffr. Ins. Par.* ii. 104, 5. *Deg. Ins.* i. pl. 13, f. 14, 19. *Sepp. Ins.* pl. 5, f. 1, 11. *Pap. d'Eur.* v. 125, pl. 204, f. 271. *Göed. Ins.* i. pl. 65; ii. pl. 37. *List. Göed.* (Angl.) 27, f. 20, a—c. (Lat.) 5, f. 20, a—c. *Albin, Nat. Hist. Engl. Ins.* pl. 11.

Bombyx vinula, *Linn. Syst. Nat.* ii. 815. *Faun. Suec.* 1112. *Gmel. ed. Syst. Nat.* i. 5, 2412, 29. *Scop. Ent. Carn.* 488. *Fabr. Sp. Ins.* ii. 178, 52; *Mant. Ins.* ii. 113, 60. *Ent. Syst. Wien. Verz.* 64. *Fam. S.* 3. *Illig. N. Ausg. dess.* i. 150, 3. *Schæff. Icon.* 138, pl. 144, f. 1, 2. *Nomencl. Panz. Müll. Faun. Fridr.* 39, 256; *Zool. Dan.* 117, 1355. *Fuessl. Sch. Ins.* 34, 647; *A. Mag.* i. 2, 271; *N. Mag.* iii. 2, 160, 167. *Esp. Schm.* iii. 95, pl. 18, f. 1—7; 395, pl. 79, f. 5. *Rossi, Faun. Etr.* ii. 169, 1077; *ed. Illig.* 272, 1077. *Vieweg, Tab. Verz.* i. 41, 23. *Borkh. Eur. Schm.* iii. 367, 137; *Rhein. Mag.* i. 384, 254. *Hufn. Tab. in Berl. Mag.* ii. 3, 400, 7; 431. *Naturf.* xiii. 228, 6; xix. 215, 29. *Schr. Faun. Boic.* ii. 1, 291, 1481. *Lang. Verz.* ii. 112, 840, 841. *Brahm, Ins. Kal.* 275, 166. *Schwarz, Raup.* 211, 373, 516, 642. *Oliv. Enc. Méth.* v. 47, 90. *Berk. Syn.* i. 134. *Turt. Syst. Nat.* iii. 203. *Stew. El. Nat. Hist.* ii, 146. *Donov. Nat. Hist. Brit. Ins.* iii. pl. 85. *Hübn. Bomb.* iii. pl. 9, f. 34; *Larv. Lep.* iii. *Bomb.* i. *Sphing.* E. a. f. 1. *God. Lép. de France*, iv. 160, pl. 15, f. 23.

Phalæna vinula, *Wilkes*, 13, pl. 29, f. 1.

Bombyx gnoma, *Fabr. Ent. Syst.* iii. 443. *Oliv. Enc. Méth.* v. 72, 169.

Bombyx vinulus, *Haw. Lep. Brit.* 86.

Var. Bombyx minax, *Hübn. Bomb.* pl. 56, f. 243.

Harpyia vinula, *Ochs. Schmett. von Eur.* iii. 20, 1. *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Andriæ Dislineatæ*) 148, 1559. *Zett. Ins. Lapp.* 922, 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 119, 13, 6.

Dicranura vinula, *Boisd.*

a—*n*. England. From Mr. Stephens' collection.
o—*q*. England.
r, *s*. Europe.

7. Cerura Phantoma.

Alæ nigricantes immaculatæ ; corpus album, supra nigro punctatum ; abdominis dorsum nigrum, segmentis margine albis.

Bombyx (Pania) Phantoma, *Dalm. Anal. Ent.* 92, 1.
Harpyia Phantoma, *Zett. Ins. Lapp.* 922, 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 119, 14, 7.

Lapland and Northern Sweden.

South America.

8. Cerura? Orsilochus.

Fœm. *Cinereo-fusca ; alæ anticæ fusciis tribus albis, 1a basali divisa, 2a undulosa, 3a submarginali ; posticæ albæ, fusco marginatæ.*

Phalæna-Bombyx Orsilochus, *Cram. Pap. Exot.* i. 72, pl. 46, f. D.
Tolype Orsilóche, *Hübn. Verz. Schmett.* 189, 1942.

Surinam.

9. Cerura? bifurcata.

Mas. *Nigricans ; antennæ testaceæ ; thorax cinereo bifasciatus ; abdomen fasciis vitta apiceque pallidioribus ; alæ anticæ pallide viridescentes, albo variæ nigro guttatæ et strigatæ ; posticæ testaceæ, fusco bifasciatæ.*

Phalæna-Bombyx bifurcata, *Anim. Ins. Surinam*, i. 33, pl. 13.

Surinam.

Asia.

10. Cerura liturata.

Mas. *Alba ; thorax fasciis tribus macularibus nigris ; abdomen fasciis apiceque nigris ; alæ argenteo-albæ ; anticæ guttis basalibus, fasciis duabus, strigis intermediis undulosis transversis maculisque costalibus nigris ; posticæ apice margineque exteriore cinereis.*

Male. White. Palpi mostly black. Antennæ white, with black branches. Thorax with three macular black bands. Abdomen with blackish bands, mostly black towards the tip. Wings silvery white. Fore wings with black dots at the base, with two black bands, with some intervening undulating black transverse streaks, and with black marks along the costa; first band double, the middle part cinereous; second band subapical, oblique, marked with white, much abbreviated posteriorly; under side white, with a broad diffuse gray band beyond the middle. Hind wings gray towards the tips and about the exterior margin. Length of the body 8—10 lines; of the wings 18—26 lines.

a, *b*. Silhet. From Mr. Stainforth's collection.
c, *d*. Silhet. Presented by E. Doubleday, Esq.
e. Madras. Presented by Walter Elliot, Esq.

Genus 2. HOPLITIS.

Corpus sat robustum, pilosum. Proboscis brevissima. Palpi breves, porrecti, pilosi, caput non superantes; articulus 3us brevissimus. Antennæ thorace paullo longiores. Scapularum angulus interior elevatus. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus minutis apicalibus. Alæ læves, longiusculæ, sat angustæ; anticæ areola appendiculari nulla, apud costam rectæ, apice rotundatæ, margine exteriore perobliquo, angulo interiore valde rotundato; posticæ vena 5a reliquis æquali. *Mas.*—Antennæ mediocriter pectinatæ, apices versus nudæ.

Hoplitis, *Hübn. Verz. Schmett.* 147; *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii.
Bombyx, p., *Fabr.*; *Esp.*; *Borkh.*; *Oliv.*; *Hübn.*; *God.*
Harpyia, p., *Ochs.*; *Duponch.*

Body rather stout, pilose. Proboscis very short. Palpi short, porrect, pilose, not extending beyond the head; third joint very short. Antennæ a little longer than the thorax. Abdomen extending a little beyond the hind wings. Legs stout, pilose; hind tibiæ with minute apical spurs. Wings rather long and narrow. Fore wings straight along the costa, rounded at the tips, very oblique along the exterior border; interior angle much rounded; discal areolet inrersected by a forked secondary vein; three inferior veins; second full four times further from the third than from the second. *Male.*—Antennæ moderately pectinated to a little beyond two-thirds of the length, simple from thence to the tips.

1. Hoplitus Milhauseri.

Cinerea, testaceo mixta; ciliæ fuscæ, in venis albidæ; alarum anticarum venæ, umbra marginis interioris, lineaque duplex posterior, posticarum albidarum angulus analis nigricantia.

———— ————, *Pap. d'Eur.* v. 120, pl. 202, f, 269.

Bombyx Milhauseri, *Fabr. Ent. Syst.* iii. 1, 355, 150. *Esp. Schmett.* iii. 108, pl. 21, f. 1—6. *Oliv. Enc. Méth.* v. 79, 187. *Vieweg, Tab. Verz.* i. 42, 25. *Brahm, Ins. Kal.* 246, 141. *Schwarz, Raup.* 390, 521, 676.

Bombyx terrifica, *Hübn. Bomb.* 110, 2, pl. 8, f, 32, 33. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* D. a. b. f. 2. *Wien. Verz.* 63. *Fam.* S. 1. *Illig. N. Ausg. dess.* 1. 149, 1; *Mag.* ii. 71. *Borkh. Eur. Schmett.* iii. 387, 144. *Rhein. Mag.* i. 383, 252. *God. Lép. de France*, iv. 176, pl. 16, f. 4.

Harpyia Milhauseri, *Ochs. Schmett. von Eur.* iii. 41, 3. *Boisd. Gen. et Ind. Méth. Eur. Lep.* 85. *Duponch. Cat. Méth. Lép.* 88.

Bombyx vidua, *Knoch, Beitr.* i, 48, 9, pl. 3, f. 3.

Hoplitis terrifica, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Andriæ Sartæ*) 147, 1556.

Hoplitis Milhauseri, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 119, 15, 1.

Germany.

2. Hoplitis? Meona.

Cervina; alæ anticæ fascia maxima antice valde dilatata nigro marginata maculisque duabus nigricantibus, necnon maculis duabus exterioribus concoloribus, una apicali, altera postica; posticæ albidæ, venis luteis maculaque postica fusca.

Phalæna-Bombyx, Meona, *Cram. Pap. Exot.* iv. 132, pl. 358, f. B.

Hoplitis Meone, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Andriæ Sartæ*) 147 1557.

Surinam.

Genus 3. TADANA.

Fœm. Corpus robustum. Proboscis capitis latitudine æqualis. Palpi porrecti, pilosi, caput non superantes; articulus 3us minutus. Antennæ simplices, thorace longiores. Abdomen alas posticas paullo superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ sat latæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore obliquo.

Female. Body stout. Proboscis distinct, as long as the breadth of the head. Palpi porrect, pilose, not extending beyond the head; third joint minute. Antennæ simple, longer than the thorax. Abdomen extending for one-fourth of its length beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings nearly straight in front, rounded at the tips, oblique along the exterior border; interior angle much rounded; discal areolet intersected by a secondary vein; three inferior veins; second about four times further from the third than from the first.

1. TADANA CINERASCENS.

Fœm. *Cinerea; abdomen cervinum; alæ anticæ fasciis quatuor angulosis macula discali guttisque exterioribus nigricantibus; posticæ fuscescentes.*

Female. Cinereous. Proboscis and antennæ tawny. Abdomen fawn-colour. Fore wings with four blackish slender zigzag bands, two before and two beyond a small blackish discal spot; a row of blackish dots along the exterior border. Hind wings brownish above, except along the costa; under side whitish, with a pale brown border. Length of the body 7 lines; of the wings 17 lines.

a. ———? From Mr. Milne's collection.

Genus 4. DESTOLMIA.

Fœm. Corpus robustum. Caput utrinque fasciculatum. Proboscis capitis latitudine æqualis. Palpi validi, porrecti, mediocriter longi, subtus dense pilosi, caput paullo superantes; articulus 3us minimus. Antennæ simplices, thorace longiores. Abdomen alas posticas longe superans. Pedes validi; tibiæ posticæ calcaribus minutis apicalibus. Alæ longiusculæ, sat angustæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore perobliquo.

Female. Body stout. Head with a tuft on each side at the base of the antennæ. Proboscis distinct, not longer than the breadth of the head. Palpi porrect, stout, of moderate length, densely pilose beneath, extending a little beyond the head; third joint very minute. Antennæ simple, longer than the thorax. Abdomen extending for rather less than half its length beyond the hind wings. Legs stout; hind tibiæ with minute apical spurs. Wings rather long and narrow. Fore wings nearly straight along the costa, rounded at the tips, very oblique and with slight notches along the exterior border; discal areolet intersected by a secondary

vein; three inferior veins; second more than twice further from the third than from the first.

1. DESTOLMIA LINEATA.

Fœm. *Albido-cinerea; thorax fascia subinterrupta albida; abdomen fuscescens, subtus canum; alæ anticæ vitta discali albida late interrupta; posticæ fuscescentes.*

Female. Gray, with numerous whitish hairs interspersed. Thorax with a whitish band, which is almost interrupted in the middle. Abdomen brownish, hoary beneath. Fore wings with a widely interrupted whitish discal stripe. Hind wings brownish above; cilia and under side whitish. Length of the body 10 lines; of the wings 25 lines.

a. Sydney. From Mr. Lambert's collection.
b. Swan River. Presented by Sir J. Richardson.

Genus 5. CECRITA.

Fœm. Corpus sat robustum. Caput utrinque fasciculatum. Proboscis obsoleta. Palpi porrecti, graciles, pilosi, caput non superantes; articulus 3us minutus, conicus. Antennæ simplices, thorace paullo longiores. Abdomen alas posticas triente superans. Pedes sat graciles; tibiæ posticæ calcaribus duobus apicalibus mediocriter longis. Alæ sat latæ; anticæ apud costam subconvexæ, apice rotundatæ, margine exteriore obliquo.

Female. Body moderately stout. Head with a tuft of long hairs on each side beneath the eyes. Proboscis not visible. Palpi porrect, pilose, slender, extending as far as the head; third joint minute, conical. Antennæ simple, rather longer than the thorax. Abdomen extending for one-third of its length beyond the hind wings. Legs rather slender; femora and tibiæ with long hairs; hind tibiæ with two moderately long apical spurs. Wings moderately broad. Fore wings slightly convex in front, rounded at the tips, oblique along the exterior border; interior angle much rounded; discal areolet intersected by a secondary vein; three inferior veins; first and second contiguous at the base; third rather remote.

1. CECRITA GUTTIVITTA.

Fœm. *Subcervino-cinerea; palpi nigri, apice cinerei; alæ anticæ fusco conspersæ, fascia obliqua fuscescente guttisque exterioribus fuscis.*

Female. Cinereous, with a slight tinge of fawn-colour; under side pale testaceous. Palpi black, cinereous towards the tips. Fore wings flecked with brown, and traversed by a brownish oblique band, which extends from beyond the middle of the costa to the interior angle; a row of brown dots along the exterior border. Length of the body 8 lines; of the wings 18 lines.

a. Nova Scotia. From Lieut. Redman's collection.

Genus 6. CLAPHE.

Mas. Corpus mediocriter robustum. Proboscis non conspicua. Palpi pilosi, caput vix superantes; articulus 1us brevissimus; 3us conicus, 2i dimidio brevior. Antennæ late pectinatæ, apices versus mediocriter pectinatæ, thorace multo breviores. Abdomen alas posticas paullo superans. Pedes sat validi; femora et tibiæ longe pilosa; tibiæ posticæ calcaribus minutis apicalibus. Alæ sat angustæ; anticæ subfusiformes, apud costam vix convexæ, apice rotundatæ, margine exteriore perobliquo.

Male. Body moderately stout. Proboscis very short or obsolete. Palpi pilose, extending very little beyond the head; first joint very short; third conical, less than half the length of the second. Antennæ much shorter than the thorax, deeply pectinated to half the length, moderately pectinated from thence to the tips. Abdomen extending for one-fourth of its length beyond the hind wings. Legs moderately stout; femora and tibiæ with long hairs; hind tibiæ with minute apical spurs. Wings rather narrow. Fore wings subfusiform, hardly convex along the costa, rounded at the tips, very oblique along the exterior border, not angular between the latter and the interior border; second inferior vein about four times further from the third than from the first; third much further from the fourth than from the second.

1. Claphe guttivena.

Mas. *Candida; antennæ ramis fulvis; alæ anticæ e guttis nigris trifasciatæ, maculisque parvis costalibus et exterioribus nigris; posticæ macula parva fusca.*

Male. Pure white. Antennæ with tawny branches. Fore wings with small black spots on the costa and along the exterior border, and with three very oblique bands of black dots on the veins. Hind wings with a brown spot by the interior angle, and most

apparent beneath. Length of the body 9 lines; of the wings 24 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 7. CLATHE.

Mas. Corpus sat validum, dense-pilosum. Proboscis obsoleta. Palpi porrecti, pilosi, caput superantes; articulus 3us lanceolatus. Antennæ subpectinatæ, thorace non longiores. Abdomen cristatum, alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus duobus apicalibus parvis. Alæ latiusculæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriore obliquo.

Male. Body thickly pilose, rather stout. Proboscis not visible Palpi porrect, clothed with long hairs, extending rather beyond the head; third joint lanceolate. Antennæ minutely pectinated, not longer than the thorax. Abdomen crested along the back, extending for one-fourth of its length beyond the hind wings. Legs stout; femora and tibiæ with long hairs; hind tibiæ with two rather short apical spurs. Wings rather broad. Fore wings hardly convex along the costa, rounded at the tips, oblique along the exterior border; interior angle rounded; discal areolet intersected by a secondary vein; three inferior veins; second more than twice further from the third than from the first.

1. CLATHE ABIDA.

Mas. *Albida, fascia pallide cervina; palpi cervini; antennæ fuscæ; pedes pallide cervini, pilis longis albidis vestiti; tarsi fusco fasciati; alæ cervino conspersæ; anticæ fascia ltomaria perobliqua fusca; posticæ cervino bifasciatæ.*

Male. Whitish. Palpi fawn-colour. Antennæ brown. Thorax and abdomen with a pale fawn-coloured dorsal stripe. Legs pale fawn-colour, with long whitish hairs; tarsi with brown bands. Wings with brown bands on the fringe. Fore wings with fawn-coloured flecks, which are most numerous in front, and with an interrupted very oblique band of brown flecks, which extends from near the tip of the costa to the middle of the interior border, where it is most conspicuous. Hind wings with two indistinct pale fawn-coloured bands. Length of the body 8 lines; of the wings 18 lines.

a. ——— ?

Genus 8. NOTODONTA.

Corpus robustum. Ocelli nulli. Proboscis brevissima. Palpi breves, porrecti, pilosi, caput non superantes; articulus 3us minimus. Thorax non cristatus. Abdomen alas posticas sat longe superans. Pedes validi; femora et tibiæ dense pilosa; tibiæ posticæ calcaribus quatuor longiusculis. Alæ longiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore denticulato, perobliquo, margine interiore apud medium fasciculato. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ simplices.

Bombyx, p., *Linn.; Fabr.; Gmel.; Oliv.; Esp.; Hübn.; Haw.; God.*
Notodonta, p., *Ochs.; Hübn. Verz. Schmett.; Herr.-Schæff.*
Notodonta et Peridea, *Steph.; Duponch.*
Hylesia, p.? *Hübn. Verz. Schmett.* 186.

Body stout. Proboscis distinct, very short. Palpi short, porrect, pilose, not extending beyond the head; third joint very minute. Abdomen extending for one-third or one-half of its length beyond the hind wings. Legs stout; femora and tibiæ densely pilose; hind tibiæ with four rather long spurs. Wings somewhat long, rather narrow or moderately broad. Fore wings nearly straight in front, rounded at the tips, very oblique, and slightly denticulated along the exterior border; interior angle very oblique; interior border tufted in the middle; discal areolet intersected by a secondary forked vein; three inferior veins; second thrice further from the third than from the first. *Male.*—Antennæ moderately pectinated. *Fem.*—Antennæ simple.

Europe.

Alæ anticæ lunula media fusca, pallidius cincta; posticæ angulo anali paullo obscuriores.

A. Lunula media parva, pallide cincta.

A. Alarum posticarum margo anterior coloratus. - trepida, *Esp.*

B. Alarum posticarum angulus analis coloratus.

a. Cinerea, strigis ambabus pallidis. - - torva, *Hübn.*

b. Fusca, ferrugineo variegata. Alæ posticæ albæ. Tritophus, *Wien. Verz.*

c. Flavo variegata. Alæ posticæ cinereæ. dromedarius, *Linn.*

B. Lunula media nigerrima, venam totam transversam occupans. Ziczac, *Linn.*

1. NOTODONTA TREPIDA.

Cinerea, subdiaphana, venis strigis et maculis castaneis; alæ posticæ albidæ, antice late cinerea.

——— ———, *Pap. d'Eur.* iv. 61, pl. 227, f. 171. *Sepp. Ins.* ii. pl. 6, f. 1—7. *Röes. Ins. Bel.* iii. 272, pl. 68, f. 3. *Kleem. Beitr.* 115, pl. 13, f. A. B.

Bombyx trepida, *Esp. Schm.* iii. 284, pl. 57, f. 1—4. *Fabr. Ent. Syst.* iii. 1, 449, 130. *Vieweg. Tab. Verz.* i. 43, 27. *Borkh. Eur. Schmett.* iii. 400, 148. *Rhein. Mag.* i. 377, 244. *Brahm. Ins. Kal.* 349, 232. *Oliv. Enc. Méth.* v. 72, 165. *Schwartz, Raup.* 386, 668, 752.

Notodonta tremula, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 123, 24, 3.

Bombyx tremula, *Wien. Verz.* 49. *Fam.* A. 4. *Illig. N. Ausg. dess.* i. 56, 4; *Mag.* ii. 43, 4. *Hübn. Bomb.* 109, 22, pl. 7, f. 30. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. g. f. 2. *Lang. Verz.* 2, 84, 652, 653.

Notodonta trepida, *Ochs. Schmett. von Eur.* iii. 86, 20. *Hübn. Verz. Schmett.* (*Phalænæ Ptilodontes Inlunatæ*), 146, 1551.

Bombyx tremula? *Linn. Faun. Suec.* 1121. *Gmel. ed. Syst. Nat.* i. 5, 2429, 58.

Bombyx chaonius, *Schr. Faun. Boic.* ii. 1, 246, 1418.

Bombyx serrata, *Thunb. Dissert. fac Akerman*, 47.

Peridea trepida, *Steph. Ill. Brit. Ent. Haust. Cat. Brit. Lep.*

a—d. England. From Mr. Stephens' collection.

e—h. England.

i—l. Europe. From M. Becker's collection.

2. NOTODONTA TORVA.

Cinerea; alæ anticæ strigis ambabus lunulaque media pallidis, striga posteriore in alas posticas continuata.

Notodonta torva, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Inlunatæ*), 146, 1550. *Ochs. Schmett. von Eur.* iii. 51, 3. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 124, 24, 4.

Bombyx torva, *Hübn. Bomb.* 108, 19, pl. 7, f. 29; *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. f. f. 2.

——— ———, *Pap. d'Eur.* iv. 63, pl. 227, f. 172.

Bombyx dodonæa, *Scriba, Beitr.* ii. 77, pl. 7, f. 6, 7. *Borkh. Eur. Schmett.* iii. 402, 149. *Rhein. Mag.* i. 378, 245.

Bombyx tritophus, *Illig. N. Ausg.* i. 146, 6; *Mag.* ii. 67, 6. *Esp. Schm.* iii. 299, pl. 60, f. 1, 2. *Borkh. Eur. Schm.* iii. 421, 156. *Brahm. Ins. Kal.* 334, 220.

a, b. Europe. From M. Becker's collection.
c. Germany.

3. Notodonta Tritophus.

Alæ anticæ fuscæ, ferrugineo variegatæ; posticæ albæ, angulo anali anguste nigro.

——— ———, *Pap. d'Eur.* v. 118, pl. 202, f. 268.

Bombyx Tritophus, *Esp. Schmett.* iii. 300, pl. 60, f. 3. *Fabr. Mant. Ins.* ii. 116, 99; *Ent. Syst.* iii. 442, 108. *Gmel. ed. Syst. Nat* i. 5, 2430, 554. *Vieweg. Tab. Verz.* pl. 1, f. 3. *Borkh. Rhein. Mag.* i. 382, 251. *Schr. Faun. Boic.* ii. 1, 289, 1478. *Schwarz. Raup.* 387, 647, 750. *Wien. Verz.* 63, 6. *Fam.* R. 6. *Illig. Mag.* ii 67, 6. *Oliv. Enc. Méth.* v. 65, 142. *Hübn. Bomb.* 109, 20, pl. 7, f. 27. *Larv. Lep.* iii. *Bomb.* i. *Spking.* C. e. f. 2. *God. Lép. France*, iv. 179, pl. 17, f. 1, 2.

Notodonta Tritophus, *Hübn. Verz. Schmett.* (*Phalænæ Ptilodontes Inlunatæ*), 146, 1548. *Ochs. Schmett. von Eur.* iii. 46, 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 124, 26, 5.

Bombyx Phœbe, *Scriba, Beitr.* i. 18, pl. 2, f. 1—5. *Schwarz. Raup.* 265.

Bombyx tremula, *Borkh. Eur. Schmett.* iii. 396, 147. *Brahm, Ins. Kal.* 259, 154. *Schwarz. Raup.* 230, 668.

Bombyx balsamifera, *Brahm, Ins. Kal.* 556, 155.

a, b. Europe. From M. Becker's collection.

4. Notodonta dromedarius.

Alæ anticæ fusco rufescente nebulosæ, litura baseos angulogue anali flavescentibus, strigisque duabus dentatis albidis; posticæ cinereæ, striga transversa pone medium pallida.

Notodonta dromedarius, *Hübn. Verz.* (*Phalænæ Ptilodontes Inlunatæ*) 146, 1549. *Ochs. Schmett. von Eur.* iii. 53, 4. *Steph. Ill. Brit. Ent. Haust.* ii. 22, 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 124, 27, 6.

Bombyx dromedarius, *Linn. Syst. Nat.* ii. 827. *Fabr. Sp. Ins* ii. 187, 78; *Mant. Ins.* ii. 106, 102; *Ent. Syst.* iii. 1, 444, 113. *Gmel. ed. Syst. Nat.* i. 5, 2430, 62. *Wien. Verz.* 63. *Fam.* R, 7. *Illig. N. Ausg. dess.* i. 147, 7. *Esp. Schm.* iii. 297, pl. 59, f. 5—9. *Vieweg, Tab. Verz.* i. 45, 30. *Borkh. Eur. Schm.* iii. 419, 55. *Rhein. Mag.* i. 382, 250. *Schr. Faun. Boic.* ii. 1, 290, 1479. *Lang. Verz.* ii. 111, 136, 837. *Brahm, Ins. Kal.* 329, 215. *Schwarz. Raup.* 383, 643, 751. *Oliv. Enc. Méth.* v. 66, 145. *Hübn. Bomb.* 109, 21, pl. 7, f. 28. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. g. f. 1. *God. Lép. France*, iv. 187, pl. 17, f. 5. *Donov. Nat. Hist. Brit. Ins.* x. 67. pl. 350, f. 1. *Haw. Lep. Brit.* 100.

——— ———, *Deg.* ii. 1, 223, pl. 4, f. 13—17. *Pap. d'Eur.* v. 116, pl. 201, f. 267. *Ammir. Ins.* pl. 14.

Phalæna dromedaria, *Hufnagel, Pl. in Berl. Mag.* 416, 23, 2, 3.

Var. Bombyx dromedarulus, *Haw. Lep. Brit.* 101; *Ent. Trans.* i. 335.

Phalæna Zeba, *Don. Nat. Hist. Brit. Ins.* xii. 1, pl. 397, f. 1.

Var. *Alæ anticæ fusco nebulosæ, litura baseos anguloque analis flavescentibus, strigisque duabus denticulatis obsoletis.*

Notodonta perfusca, *Steph. Ill. Brit. Ent. Haust.* ii. 23, 2, pl. 14, f. 2.

Bombyx perfuscus? *Haw Lep. Brit* 100.

a—n. England. From Mr. Stephens' collection.
o—s. England.
t—w. Europe. From M. Becker's collection.

5. Notodonta Ziczac.

Alæ anticæ suturate fuscæ, spadiceo undatæ et fasciatæ, striga lunuri ferruginea; posticæ albidæ, fascia lituraque anali obsoleta.

Notodonta Ziczac, *Hübn. Verz. Schmett.* (*Phalænæ Ptilodontes Inlunatæ*) 146, 1547. *Ochs. Schmett. von Eur.* iii. 48, 2. *Steph. Ill. Brit. Ent. Haust.* ii. 23, 3. *Zett. Ins. Lapp.* 923, 1. *Duponch. Suppl. Lép. France, Pseudobom.* pl. 4, f. 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text.* 124, 28, 7.

Bombyx Ziczac, *Linn. Syst. Nat.* ii. 827; *Faun. Suec.* ed. ii. 296, 1116. *Fabr. Sp. Ins.* ii. 186, 76; *Mant. Ins.* ii. 116, 98; *Ent. Syst.* iii. 1. 442, 107. *Schæff. Icon.* pl. 69, f. 2, 3.

Nomencl. Panz. 86. *Esp. Schm.* iii. 293, pl. 69, f. 1—4, *Gmel. ed. Syst. Nat.* i. 5, 2430, 61. *Müll. Faun. Fridr.* 40, 362; *Zool. Dan.* 119, 1371. *Fuessl. Schweiz. Ins.* 36, 677. *A. Mag.* ii. 1, 7; *N. Mag.* ii. 60, 61; iii. 2, 154, 99; 158, 138; 163, 188. *Wien. Verz.* 63. *Fam.* R. 5. *Illig. N. Ausg. dess.* i. 146, 5; *Mag.* ii. 66, 5. *Rossi, Faun. Etr.* ii. 171, 1084; *ed. Ill.* 275, 1084. *Viewèg, Tab. Verz.* i. 46, 131. *Borkh, Eur. Schmett.* iii. 415, 154; *Rhein. Mag.* i. 381, 249. *Hufn. Tab. in Berl. Mag.* 2, 4, 410, 23. *Naturf.* xix. 216, 61. *Schr. Faun. Boic.* ii. 1, 289, 1477. *Lang. Verz.* ii. 110, 834, 835. *Schwarz, Raup.* 381, 527, 643, 751. *Brahm, Ins. Kal.* 265, 157; 514, 375. *Oliv. Enc. Méth.* v. 64, 141. *Hübn. Bomb.* 108, 18, pl. 6, f. 26; *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. e, f. 1. *Berk. Syn.* i. 138. *Don. Nat. Hist. Brit. Ins.* iv. 29, pl. 119. *Stew. El. Nat. Hist.* ii. 153. *Turt. Syst. Nat.* iii. 209. *God. Lép. de France*, iv. 182, pl. 17, f. 3, 4.

——— ———, *Albin, Ins.* pl. 14, f. 20. *Rèaum. Ins.* ii. pl. 22, f. 9—16. *Merian. Ins.* pl. 147. *Geoff. Ins.* ii. 123, 29. *Frisch, Besch. Ins.* iii. 4, pl. 2, f. 1, 2. *Röes. Ins. Bel.* i. 129, pl. 20, f. 1—8. *Sepp, Neederl. Ins.* pl. 12, f. 1—10. *Deg. Ins.* i. 1, 90, pl. 6, f. 1—10, 4; ii. 222, 1. *Pap. d'Eur.* v. 113, pl. 200, f. 266. *Göed. Ins.* iii. pl. E. *List. Göed.* (Angl.) 30, f. 21 (Lat.), 63, f. 21.

Phalæna Ziczac, *Wilkes*, 12, pl. 28.
Bombyx Ziczacus, *Haw. Lep. Brit.* 99.

a—g. England. From Mr. Stephens' collection.
h, i. England.
j, k. Europe. From M. Becker's collection.

North America.

6. NOTODONTA ANGULOSA.

Mas. *Cristata; alæ anticæ cervinæ, lineis flexuosis liturisque nigris, dente dorsali porrecto; posticæ albidæ.* Fœm.— *Alæ anticæ cinereæ maculis anticis albis fasciisque tribus luteis; posticæ pallide testaceæ, macula costali subapicali fusca.*

Phalæna angulosa, *Abbot and Smith, Nat. Hist. Lep. Ins. Georg.* ii. 165, pl. 83.

Georgia.

7. NOTODONTA BASITRIENS.

Mas. *Cinerea nigro varia, subtus cana; thorax nigro fasciatus; abdomen subtestaceum; alæ anticæ albido variæ, fascia tenui undulosa obliqua fusca, plagaque basali testacea apud discum fuscescente nigroque marginata; posticæ albidæ, fascia apicibusque cinereis.*

Male. Cinereous, hoary beneath. Head, thorax and fore wings partly clothed with black hairs. Proboscis testaceous. Antennæ tawny. Thorax with a slender black band between the fore wings. Abdomen slightly testaceous. Fore wings with a testaceous patch, which occupies the basal third part of the wing, is bordered with black, and has a brownish disk; the adjoining part of the wing has a whitish tinge, which is widest in front, and beyond it there is a slender undulating oblique brown band, which is obsolete towards the costa; the wings beyond are indistinctly mottled. Hind wings whitish for about two-thirds from the base, with a slight discal undulating grayish band, which corresponds to the band of the fore wings. Length of the body 8 lines; of the wings 19 lines.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

South America.

8. NOTODONTA? NESEA.

Obscure fusca; abdomen et alæ posticæ pallide fusca; alæ anticæ fasciis duabus connexis fuscis; striga una apicali rufa alteraque transversa subapicali alba, vitta postica dentata cinerea.

Phalæna-Bombyx Nesea, *Cram. Pap. Exot.* iv. 31, pl. 305, f. C.

Notodonta Nesea, *Hübn. Verz. Schmett.* (*Phalænæ Ptilodontes Inlunatæ*), 146, 1546.

Surinam.

9. NOTODONTA? PHADIMA.

Cervina; alæ anticæ basi costa fasciisque duabus antice dilatatis fuscis.

Phalæna-Bombyx Phadima, *Cram. Pap. Exot.* iv. 220, pl. 395, f. F.

Hylesia Phadima, *Hübn. Verz. Schmett.* 186, 1919.

Antennæ pubescent. Abdomen extending a little beyond the hind wings. Tarsi hairy. Fore wings convex in front, rounded at the tips, very oblique along the exterior border, which forms an almost continuous curve with the interior border.

Surinam.

10. NOTODONTA? DOLABRATA.

Fœm. *Cervina; alæ anticæ sericeæ nitentes, apud costam fuscæ liturisque plurimis transversis fuscis notatæ.*

Phalæna dolabrata, *Cram. Pap. Exot.* iv. 34, pl. 306, f. F.

Fem. Antennæ simple, longer than the thorax. Abdomen extending as far as the hind wings. Wings moderately broad. Fore wings slightly convex along the costa, rounded at the tips, very oblique along the exterior border; interior angle much rounded.

Surinam.

Africa.

11. NOTODONTA? BITIA.

Mas. *Obscure viridis; antennæ, abdomen et alæ posticæ ferruginea; alæ anticæ fasciis linearibus basalibus nonnullis alterisque discalibus margineque fuscis.*

Phalæna-Bombyx Bitia, *Cram. Pap. Exot.* iv. 69, pl. 322, f. F.

Male. Dull dark green. Antennæ, abdomen and hind wings ferruginous. Fore wings with slender brown bands, some near together towards the base, others more oblique and in the disk; exterior border brown.

Guinea.

Genus 9. PHEOSIA.

Corpus vix robustum. Proboscis distincta, brevissima. Palpi brevissimi, caput non superantes; articulus 3us minimus. Antennæ thorace paullo longiores. Thorax non cristatus. Abdomen cristatum, alas posticas triente superans. Pedes sat breves et graciles; tibiæ posticæ calcaribus duobus apicalibus minutis. Alæ longiusculæ, sat angustæ; anticæ subfusiformes, apud costam rectæ, apice vix angulatæ, margine exteriore perobliquo, margine interiore apud medium fasciculato. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ subpectinatæ.

Bombyx, p., *Linn.*; *Fabr.*; *Esp.*; *Hübn.*; *Haw.*; *God.*
Notodonta, p., *Ochs.*; *Boisd.*; *Zett.*; *Herr.-Schæff.*
Pheosia, *Hübn. Verz. Schmett.* 145.
Leiocampa, *Steph. Ill. Brit. Ent. Haust.* ii. 24; *Duponch.*

Body hardly stout. Proboscis distinct, very short. Palpi very short, not extending beyond the head; third joint very minute. Antennæ a little longer than the thorax. Abdomen extending from one-third of its length beyond the hind wings. Legs rather short and slender; hind tibiæ with minute apical spurs. Wings rather long and narrow. Fore wings nearly fusiform, straight along the costa, hardly angular at the tips, very oblique along the exterior border; interior angle rounded; interior border tufted in the middle; discal areolet intersected by a secondary vein; three inferior veins; second more than four times further from the third than from the first. *Male.*—Antennæ moderately pectinated to the tips. *Female*—Antennæ minutely pectinated.

1. Pheosia dictæa.

Alæ anticæ exustæ, marginibus fuscis plagaque media albida; posticæ albæ, litura anali fusca.

Leiocampa dictæa, *Steph. Ill. Brit. Ent. Haust.* ii. 25, 1.
Bombyx Dictæa, *Linn. Syst. Nat.* ii. 826, 60. *Fabr. Sp. Ins.* ii. 187, 77; *Mant. Ins.* ii. 116, 101; *Ent. Syst.* iii. 1, 443, 111. *Gmel. ed. Syst. Nat.* i. 5, 2430, 60. *Wien. Verz.* 62. *Fam.* R., 1. *Illig. Mag.* ii. 43, 4; 63, 1. *Esp. Schmett.* iii. 290, pl. 58, f. 5; pl. 84. *Cont. Bomb.* pl. 5, f. 2. *Fuessl. N. Mag.* iii. 2, 144, 11; 154, 101. *Vieweg, Tab. Verz.* i. 44, 28, pl. 1, f. 1. *Borkh. Eur. Schmett.* iii. 404, 150. *Lang. Verz.* ii. 111, 838, 839. *Brahm, Ins. Kal.* 98, 44; 325, 211. *Schwarz, Raup.* 257, 381, 646, 749, 776. *Oliv. Enc. Méth.* v. 66, 144. *Hübn. Bomb.* 108, 16, pl. 6, f. 22. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C, d, e, f. 1.
Bombyx tremula, *Linn. Syst. Nat.* ii. 826, 58; *Faun. Suec.* ed. 2, 298, 1121. *Gmel. ed. Syst. Nat.* i. 5, 2429, 58. *Clerck, Icon.* pl. 9, f. 13. *Illig. N. Ausg. dess.* i. 57. *Fuessl. Schw. Ins.* 36, 675. *Borkh, Rhein. Mag.* i. 379, 246. *Schr. Faun. Boic.* ii. 1, 246, 1417.
——— ——— *Pap. d'Eur.* v. 102, pl. 197, f. 260, 261. *Naturf.* vi. 116, pl. 5, f. 4.
Phalæna porcellana, *Hufn. Pl. in Berl. Mag.* 2, 3, 420, 38.
Phalæna trepida, *Don. Nat. Hist. Brit. Ins.* vii. pl. 239, f. 1. *Stew. El. Nat. Hist.* ii. 154.

Bombyx Tremulus, *Haw. Lep. Brit.* 99.
Notodonta dictæa, *Ochs. Schmett.* iii. 63, 8. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 124, 23, 2.
Pheosia dictæa, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Extersæ*), 145, 1535.

a—i. England. From Mr. Stephens' collection.
j, k. England.
l, m. Europe. From M. Becker's collection.

2. Pheosia dictæoides.

Alæ anticæ exustæ, plaga media maculaque anguli interioris triangulari alba; posticæ fuscescentes, litura anali fusca.

Leiocampa dictæoides, *Steph. Ill. Brit. Ent. Haust.* ii. 25, 2. *Westw. & Humph. B. Moths*, i. 67, pl. 13, f. 18, 19.
Bombyx dictæoides, *Esp. Schmett.* iii. pl. 84; *Cont. Bomb.* 27, pl. 5, f. 3. *Hübn. Bomb.* 108, 17, pl. 6, f. 23, 24. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. d. e. f. 1, a. *Haw. Ent. Trans.* i. 335. *Brahm, Ins. Kal.* 330, 216. *Schwarz, Raup.* 646, 740, 777. *God. Lép. de France*, iv. 199, pl. 19, f. 2.
Notodonta dictæoides, *Ochs. Schmett. von Eur.* iii. 66, 9. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 123, 22, 1.
Bomb. Gnoma, *Fabr. Sp. Ins.* ii. 190, 89; *Mant. Ins.* ii. 122, 123; *Ent. Syst.* iii. 443, 112. *Gmel. ed. Syst. Nat.* i. 5, 2432, 558.
——— ———, *Pap. d'Eur.* v. 102, pl. 197, f. 260, 261. *Esp. Vieweg, Tab. Verz.* i. H. pl. 1, f. 2.
Bombyx dictæa, *Borkh. Eur. Schmett.* iii. 404, 150; *Rhein. Mag.* i. 380, 247.
Phæosia dictæoides, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Extersæ*), 145, 1536.

a—e. England. From Mr. Stephens' collection.
f—h. England.

3. Pheosia frigida.

Mas. *Alæ anticæ dorso dentatæ fuscæ, costa cinerea, macula ante apicem elongata vittaque basali nigris; posticæ fuscescentes, litura anali obscuriore.*

Notodonta frigida, *Zett. Ins. Lap.* 923, 3.

Allied to *P. Dictæa* and to *P. Dictæoides*, but distinguished from the former by its brown hind wings, from the latter by the cinereous triangular spot of the interior angle of the fore wings,

which is wanting or very slender and like a streak, and from both by the cinereous middle blotch in each fore wing.

Lapland.

Genus 10. OCHROSTIGMA.

Corpus sat robustum. Proboscis non conspicua. Palpi breves, valde pilosi, caput non superantes; articulus 3us conicus, minimus. Antennæ thorace multo longiores. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat latæ; anticæ apud costam subrectæ, apice vix angulatæ, margine exteriore subobliquo, margine interiore apud medium fasciculato. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ simplices, graciles.

Ochrostigma, *Hübn. Verz. Schmett.* 146.
Bombyx, p., *Scriba; Knoch; Esp.; Hübn.; God.*
Notodonta, p., *Ochs.*
Drynobia, *Duponch.; Herr.-Schæff.*

Body moderately stout. Proboscis not visible. Palpi short, very pilose, not extending beyond the head; third joint conical, very small. Antennæ much longer than the thorax. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout, pilose; hind tibiæ with four rather long spurs. Wings moderately broad. Fore wings nearly straight along the costa, hardly angular at the tips, slightly oblique along the exterior border; interior angle rounded; interior border tufted in the middle; discal areolet distinctly intersected; three inferior veins; second about thrice further from the third than from the first. *Male.*—Antennæ moderately pectinated to the tips. *Female.*—Antennæ simple, slender.

1. Ochrostigma velitaris.

Alarum anticarum area media fusco-cinerea; apex versus marginem anteriorem late albidus, versus limbum fuscus.

Drynobia velitaris, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 125, 30, 1.
Bombyx velitaris, *Knoch, Beitr.* i. 66, pl. 4, f. 8. *Esp. Schmett.* iii. 292, pl. 58, f. 6. *Borkh. Eur. Schm.* iii. 393, 146; *Rhein. Mag.* i. 377, 243. *Brahm, Ins. Kal.* 290, 180. *Schwarz, Raup*, 670. *God. Lép. de France*, iv. 209, pl. 20, f. 2. *Rossi, Faun. Etrusc. Mant.* ii. 18, 371.
Ochrostigma Austera, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes*), 146, 1544.

Bombyx Austera, *Wien. Verz. Fam.* A. 310, 7, 8. *Illig. N. Ausg. dess.* i. 61, 7, 8; *Mag.* ii. 46, 7, 8. *Hübn. Bomb.* 105, 6, pl. 4, f. 15; *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. b. f. 1.

——— ———, *Pap. d'Eur.* v. 109, pl. 200, f. 264.

Phalæna velitaris, *Hufnagel, Tab. in Berl. Mag.* 3, 4, 394, 64. *Naturf.* ix. 129, 64; xviii. 215, pl. 5, f. 1, 2.

Bombyx bifasciata, *De Vill. Ent. Linn.* ii. 173, 105, pl. 5, f. 6.

Notodonta velitaris, *Ochs. Schmett. von Eur.* iii. 75, 14.

a, *b*. Europe. From M. Becker's collection.

2. OCHROSTIGMA MELAGONA.

Alarum anticarum area media dimidio basali fusco; apex versus marginem anteriorem fuscus, in venis 7, 8 et 9 nigro notatus.

Bombyx melagona, *Scriba, Beitr.* ii. 71, pl. 7, f. 2. *God. Lép. de France*, iv. 212, pl. 20, f. 3. *Borkh. Eur. Schm.* iii. 423, 157. *Hübn. Bomb.* 105, 7, pl. 4, f. 14. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C, b, f. 1.

Drynobia melagona, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 125, 31, 2.

Bombyx obliterata, *Esp. Schm.* iii. 245, pl. 47, f. 1, 2. *Borkh. Eur. Schm.* iii. 437, 165. *Schwarz, Raup.* 265, 390, 532.

Ochrostigma melagona, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Extersæ*), 146, 1545.

Bombyx deleta, *Brahm, Ins. Kal.* 379, 255.

Notodonta melagona, *Ochs. Schm. Eur.* iii. 77, 15.

Europe.

Genus 11. PTEROSTOMA.

Corpus sat gracile. Proboscis distincta, brevissima. Palpi longissimi, pilosi, oblique ascendentes; articulus 3us 2i dimidio brevior. Antennæ thorace multo longiores. Abdomen alas posticas triente superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam rectæ apice angulatæ, margine exteriore denticulato et subobliquo, margine interiore indentato et bifasciculato. *Mas.*—Antennæ late pectinatæ. Abdomen fasciculis duobus longis apicalibus. *Fœm.*—Antennæ subpectinatæ.

Pterostoma, *Germ. Prod.* 43. *Steph. Cat. Brit. Lep.* 41.
Ptilodontis, *Steph. Ill. Brit. Ent. Haust.* ii. 28; *Duponch.*
Bombyx, p., *Linn.*; *Fabr.*; *Gmel.*; *Oliv.*; *Hübn.*; *Haw.*
Odontosia, p., *Hübn. Verz. Schmett.*

Notodonta, p., *Ochs.*
Orthorhina, *Boisd.*

Body rather slender. Proboscis distinct, very short. Palpi very long, pilose, obliquely ascending, longer than the head; second and third joints cylindrical; third less than half the length of the second. Antennæ much longer than the thorax. Abdomen extending for one-third of its length beyond the hind wings. Legs rather slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings straight along the costa, angular at the tips, denticulate and slightly oblique along the exterior border; interior angle obtuse; interior border indented and bifasciculate; discal areolet intersected by a secondary vein; three inferior veins; second full twice further from the third than from the first. Abdomen with two long tufts at the tip. *Male.*—Antennæ deeply pectinated to the tips. *Female.*—Antennæ minutely pectinated.

1. PTEROSTOMA PALPINA.

Alæ anticæ cano-albidæ, nigro venosæ et striatæ.

Pterostoma palpina, *Steph. Cat. Brit. Lep.* 42, 1. *Westw. & Humph. B. Moths*, i. 70, pl. 14, f. 6.

Ptilodontis palpina, *Steph. Ill. Brit. Ent. Haust.* ii. 28, 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 127, 36, 1.

Bombyx palpina, *Linn. Syst. Nat.* ii. 828, 64. *Faun. Suec. ed.* 2, 305, 1146. *Fabr. Sp. Ins.* ii. 187, 88; *Mant. Ins.* ii. 121, 120; *Ent. Syst.* iii. 448, 129. *Gmel. ed. Syst. Nat.* 1, 5, 2431, 64. *Clerck, Icon.* pl. 9, f. 8. *Turt. Syst. Nat.* iii. 213. *Wien. Verz.* 62. *Fam. Q.* 2. *Illig. N. Ausg. dess.* i. 139, 2. *Esp. Schm.* iii. 315, pl. 63, f. 1—4. *Hufn. Tab. in Berl. Mag.* 2, 3, 422, 40, 437. *Fuessl. Schw. Ins.* 36, 679; *A. Mag.* ii. 1, 85; *N. Mag.* iii. 2, 164, 209. *Rossi, Faun. Etr.* ii. 173, 1088; *ed. Illig.* 276, 1088. *Vieweg, Tab. Verz.* i. 46, 32. *Borkh. Eur. Schm.* iii. 389, 145; *Rhein. Mog.* i. 376, 242. *Lang. Verz.* ii. 109, 827, 828. *Brahm, Ins. Kal.* 513, 374. *Schwarz, Raup.* 255, 384, 528, 657. *Oliv. Enc. Méth.* v. 72, 164. *Hübn. Bomb.* 105, 9, pl. 4, f. 16; *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. c. f. 2. *God. Lép. de France*, iv. 203, pl. 19, f. 3, 4.

——— ———, *Deg. Ins.* i. 1, 52, pl. 4, f. 7; 4, 117, pl. 4, f. 7; ii. 1, 242, 2. *Sepp. Neederl. Ins.* vi. pl. 4, f. 1—7. *Pap. d'Eur.* v. 98, pl. 196, f. 259. *Naturf.* ii. 14, pl. 1, f. 6; viii. 107, 40; x. 89, pl. 2, f. 2.

Notodonta palpina, *Ochs. Schm. Eur.* iii. 69, 11.

Bombyx palpinus, *Schr. Faun. Boic.* ii. 1, 287, 1474. *Haw. Lep. Brit.* 96.

Odontosia palpina, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Extersæ*), 145, 1539.

a—h. England. From Mr. Stephens' collection.
i—l. England.
m—p. Europe. From M. Becker's collection.
r. Europe.

Genus 12. LOPHOPTERYX.

Corpus sat robustum. Proboscis capitis latitudine longior. Palpi porrecti, pilosi, caput non superantes; articulus 3us minutus, conicus. Antennæ thorace longiores. Abdomen alas posticas paullo superans. Pedes sat validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ latiusculæ; anticæ apud costam vix convexæ, apice angulatæ, margine exteriore denticulato et subobliquo. *Mas.*—Antennæ subpectinatæ. *Fœm.*—Antennæ simplices.

Lophopteryx, *Steph. Ill. Brit. Ent. Haust.* ii. 26. *Herr.-Schæff.*; *Duponch.*
Bombyx, p., *Linn.*; *Fabr.*; *Gmel.*; *Oliv.*; *Esp.*; *Hübn*; *Haw.*; *God.*
Notodonta, p., *Ochs.*
Odontosia, p., *Hübn. Verz. Schmett.* 145.

Body moderately stout. Proboscis longer than the breadth of the head. Palpi porrect, pilose, extending as far as the head; third joint minute, conical. Antennæ longer than the thorax. Abdomen extending for hardly one-fourth of its length beyond the hind wings. Legs moderately stout; hind tibiæ with four rather long spurs. Wings rather broad. Fore wings hardly convex along the costa, angular at the tips, denticulated and slightly oblique along the exterior border; interior border deeply tufted in the middle; discal areolet intersected by a secondary vein; three inferior veins; second about four times further from the third than from the first. Hind wings slightly denticulated. *Male.*—Antennæ minutely pectinated. *Female.*—Antennæ simple.

Europe.

A. Limbus alarum anticarum in vena 4a in dentem majorem productus.
  A. Violaceo-fusca. - - - - - - carmelita, *Esp.*
  B. Ochracea. - - - - - cucullina, *Wien. Verz.*
B. Limbus alarum anticarum æqualiter dentatus. camelina, *Linn.*

1. Lophopteryx carmelita.

Alæ rubiginosæ, anticæ ad marginem interiorem canescentes, maculis duabus albis costalibus; posticæ faseia obsoleta albida lituraque anali cærulescente.

Lophopteryx carmelita, *Steph. Ill. Brit. Ent. Haust.* ii. 27, 3, pl. 14, f. 3. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 126, 33, 1.

Bombyx carmelita, *Esp. Bomb.* iii. 65, pl. 91, f. 1. *God. Lép. de France*, iv. 194, pl. 18, f. 6.

Bombyx capuzina, *Hübn. Samml.* pl. 81; *Bomb.* 107, 13, pl. 5, f. 21. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. c. f. 3. *Illig. Mag.* ii. 65.

Phalæna capuzina, *Turt. Syst. Nat.* iii. 213.

Notodonta carmelita, *Ochs. Schmett. von Eur.* iii. 61, 7. *Zett. Ins. Lapp.* 923, 4.

Odontosia carmelita, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Odontosiæ*), 146, 1541.

a. England. From Mr. Stephens' collection.
b. England.
c, *d*. Europe. From M. Becker's collection.
e. Europe.

2. Lophopteryx camelina.

Alæ anticæ ferrugineæ fascia obscuriore denticuloque dorsali reflexo; posticæ ochraceæ, macula anali fusca.

Lophopteryx camelina, *Steph. Ill. Brit. Ent. Haust.* ii. 26, 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 126, 35, 3. *Westw. & Humph. B. Moths*, i. 68, pl. 14, f. 1, 2.

Bombyx camelina, *Linn. Syst. Nat.* ii. 1, 832, 80. *Faun. Suec. ed.* 2, 305, 1145. *Gmel. ed. Syst. Nat.* i. 5, 2438, 80. *Fabr. Sp. Ins.* ii. 190, 91; *Mant. Ins.* ii. 120, 124. *Ent. Syst.* iii. 1, 450, 133. *Don. Nat. Hist. Brit. Ins.* vi. 7, pl. 183. *Stew. El. Nat. Hist.* ii. 156. *Turt. Syst. Nat.* iii. 213. *Wien. Verz.* 63. *Fam.* R. 3. *Illig. N. Ausg. dess.* i. 144, 3. *Esp. Schm.* iii. 360, pl. 79, f. 1—5. *Fuessl. Schw. Ins.* 36, 686. *Vieweg, Tab. Verz.* i. 47, 33. *Borkh. Eur. Schm.* iii. 409, 152; *Rhein. Mag.* i. 381, 248. *Hufn. Tab. in Berl. Mag.* 2, 3, 414, 29. *Lang. Verz.* ii. 110, 832, 833. *Brahm, Ins. Kal.* 333, 219. *Schwarz. Raup.* 260, 385, 646, 749. *Oliv. Enc. Méth.* v. 74, 171. *Hübn. Bomb.* 107, 14, pl. 5, f. 19. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. d. f. 1; *Sphing.* C. c. f. 2. *God. Lép. de France*, iv. 192, pl. 18, f. 4, 5.

Bombyx capucina, *Linn. Syst. Nat.* ii. 832, 79; *Faun. Suec. ed.* 2, 304, 1144. *Gmel. ed. Syst. Nat.* i. 5, 2438, 79. *Wien. Verz.* 63. *Fam.* R. 4. *Illig. N. Ausg. dess.* i. 145, 4; *Mag.* ii. 63, 4. *Fabr. Sp. Ins.* ii. 190, 90; *Mant. Ins.* ii. 120, 124; *Ent. Syst.* iii 1, 449, 132. *Fuessl. Schw. Ins.* 36, 685. *Oliv. Enc. Méth.* v. 74, 170. *Borkh. Eur. Schm.* iii. 413, 152.

——— ———, *Geoffr. Ins.* ii. 111, 12. *Röes. Ins. Bel.* i. 2, 165, pl. 28, f. 1—5. *Sepp, Neederl. Ins.* pl. 1, f. 1—11. *Pap. d'Eur.* v. 106, pl. 199, f. 263. *Reaum. Ins.* ii. pl. 20, f. 13.

Phalæna camelina, *Müll. Zool. Dan.* 119, 1378. *Fuessl. Schw. Ins.* 36, 685.

Bombyx camelina, *Schr. Faun. Boic.* ii. 1, 288, 1475. *Haw. Lep. Brit.* 96.

Bombyx capucinus, *Schr. Faun. Boic.* ii. 1, 288, 1476.

Notodonta camelina, *Ochs. Schmett. von Eur.* iii. 58, 6. *Zett. Ins. Lapp.* 923, 2.

Odontosia camelina, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Odontosiæ*), 146, 1542.

a. England. Presented by H. Doubleday, Esq.
b—n. England. From Mr. Stephens' collection.
o. England. From Mr. Stevens' collection.
p, r. England.
s—u. Europe. From M. Becker's collection.

3. Lophopteryx cucullina.

Alæ anticæ ochraceæ ferrugineo maculatæ et striatæ, fascia marginali cinereo-albida; posticæ cinereæ litura anali ferruginea.

Lophopteryx cuculla, *Steph. Ill. Brit. Ent. Haust.* ii. 27, 2.

Lophopteryx cucullina, *Herr. Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 126, 34, 2. *Westw. & Humph. B. Moths*, i. 69, pl. 129, f. 3, 4.

Bombyx cucullina, *Wien. Verz. Fam.* R. 311, 8. *Illig. N. Ausg. dess.* i. 145, 4, 5; *Mag.* ii. 64? *Hübn. Bomb.* 107, 15, pl. 5, f. 20; *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. d. f. 2; *Sphing.* C. c. f. 3. *God. Lép. de France*, iv. 190, pl. 18, f. 3.

Bombyx cuculla, *Esp. Schm.* iii. 364, pl. 71, f. 1. *Borkh. Eur. Schmett.* iii. 414, 153. *Naturf.* xxix. 213, 2. *Brahm, Ins. Kal.* 333, 218. *Schwarz. Raup.* 673.

——— ———, *Albin, Nat. Hist. Engl. Ins.* pl. 69, f. 6. *Pap. d'Eur. Suppl.* pl. 9, f. 263.

Phalæna cuculla, *Donov. Nat. Hist. Brit. Ins.* x. 31, pl. 338, f. 1.

Bombyx cucullus, *Haw. Lep. Brit.* 97.

Odontosia cucullina, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Odontosiæ*), 146, 1543.

a—c. England. From Mr. Stephens' collection.
d, e. England.
f. g. Europe. From M. Becker's collection.
h. Europe.

Genus 13. SPATALIA.

Corpus gracile. Proboscis conspicua, capitis latitudine non longior. Palpi breves, graciles, caput non superantes; articulus 3us minutus, acutus. Antennæ thorace paullo longiores. Abdomen alas posticas triente superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ sat latæ; anticæ apud costam subrectæ, apice vix angulatæ, margine exteriore subobliquo et nonnunquam denticulato, margine interiore fasciculato. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ simplices.

Bombyx, p., *Fabr.*; *Illig.*; *Esp.*; *God.*
Spatalia, *Hübn. Verz. Schmett.* 145, 1537.
Notodonta, p., *Ochs*; *Herr.-Schæff.*
Heterodonta et Microdonta, *Duponch.*

Resembles the genus *Parathyris*. Body slender. Proboscis distinct, not longer than the breadth of the head. Palpi short, slender, not extending beyond the head; third joint minute, acute. Antennæ rather longer than the thorax. Abdomen extending for one-third of its length beyond the hind wings. Legs rather slender; hind tibiæ with four moderately long spurs. Wings moderately broad. Fore wings almost straight in front, hardly angular at the tips, slightly oblique along the exterior border; interior border tufted in the middle; discal areolet intersected by a secondary vein; three inferior veins; second about thrice further from the third than from the first. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ simple.

In *S. argentina* the fore wings are denticulated along the exterior border and the interior border is indented and deeply tufted; in *S. bicolora* the outer border is entire and the interior border is slightly tufted.

1. Spatalia argentina.

Olivaceo-ochracea; alæ anticæ basim versus aurantiacæ, maculis irregularibus argenteis.

Bombyx argentina, *Wien. Verz.* 62, 249, 250, pl. 1, f. 1. 2. *Fam.* R. 2. *Illig. N. Ausg. dess.* i. 142, 2. *Fabr. Sp. Ins.* ii. 184, 69; *Mant. Ins.* ii. 117, 88; *Ent. Syst.* iii. 1, 441, 103. *Gmel. ed. Syst. Nat.* i. 5, 2429, 550. *Esp. Schmett.* iii. 267, pl. 53, f. 1, 2. *Oliv. Enc. Méth.* v. 63, 137. *Panz. Faun. Germ.* 2, 13. *God. Lép. de France*, iv. 201. *Borkh, Eur. Schmett.* iii. 407, 151. *Brahm, Ins. Kal.* 392, 271. *Schwarz, Raup.* 258, 389.

Spatalia argentina, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Extersæ*) 145, 1537. *Herr.-Schaff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 125, 32, 1.

——— ———, *Pap. d'Eur.* v. 104, pl. 198, f. 262.

Notodonta argentina, *Ochs. Schmett. von Eur.* iii. 67, 10.

Heterodonta argentina, *Duponch. Cat. Lép.* 92.

a—c. Europe. From M. Becker's collection.

2. SPATALIA BICOLORA.

Nivea; alæ anticæ strigis duabus transversis interruptis nigris, plagam aurantiacam includentibus.

Notodonta bicolora, *Ochs. Schmett. Eur.* iii. 73, 13. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 124, 29, 8.

Spatalia bicolora, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Extersæ*) 145, 1538.

Bombyx bicolora, *Wien. Verz.* 49. *Fam.* A. 3. *Illig. N. Ausg. dess.* i. 56, 3; *Mag.* ii. 43, 3. *Fabr. Ent. Syst.* iii. 1, 459, 162. *Esp. Schmett.* iii. 217, pl. 41, f. 7. *Fuessl. N. Mag.* ii. 373. *Borkh. Eur. Schmett.* iii. 301, 113. *Rhein. Mag.* i. 336, 168. *Lang. Verz.* 2, 85, 657, 658. *Brahm, Ins. Kal.* 328, 414. *Schwarz, Raup.* 530, 642. *Oliv. Enc. Méth.* i. 5, 82, 197. *Hübn. Bomb.* 106, 12, pl. 5, f. 18; *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. c. f. 4. *God. Lép. de France*, iv. 207, pl. 20, f. 1.

——— ———, *Pap. d'Eur.* iv. 59, pl. 126, f. 170. *Naturf.* xii. 74, 5, pl. 11, f. 9, 10; xxix. 207.

Microdonta bicolora, *Duponch. Cat. Lép.* 93.

a—c. Europe. From M. Becker's collection.

Genus 14. DRYMONIA.

Corpus robustum. Ocelli nulli. Proboscis brevis, debilis. Palpi breves, pilosi, caput non superantes; articulus 3us minimus. Antennæ thorace multo longiores. Thorax non cristatus. Abdomen alas posticas triente superans. Pedes breviusculi, sat graciles; tibiæ posticæ calcaribus quatuor longiusculis. Alæ longiusculæ, mediocriter latæ; anticæ apud costam fere rectæ, apice rotundatæ, margine exteriore obliquo integro, interiore vix fasciculato. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ simplices.

Noctua, p., *Fabr.*

Phalæna, p., *Donov.*

Phalæna-Noctua, p., *Stew.*; *Turt.*

Bombyx, *Hübn.*; *God.*
Notodonta, p., *Ochs.*
Drymonia, p., *Hübn. Verz. Schmett.* 144. *Herr.-Schæff*; *Steph.*
Chaonia, *Steph. Ill. Brit. Ent. Haust.* ii. 10; *Duponch.*

Body stout. Ocelli wanting. Proboscis short, feeble. Palpi short, pilose, not extending beyond the head; third joint very minute. Antennæ much longer than the thorax. Thorax not crested. Abdomen extending for one-third of its length beyond the hind wings. Legs rather short and slender; hind tibiæ with four rather long spurs. Wings rather long, moderately broad. Fore wings almost straight along the costa, rounded at the tips, oblique and entire along the exterior border; interior border hardly tufted; discal areolet intersected by a secondary vein; three inferior veins; second about four times further from the third than from the first.

Europe.

A. Alæ anticæ lunula media alba. - - Querna, *Wien. Verz.*
B. Alæ anticæ lunula media nigra. - Chaonia, *Wien. Verz.*
C. Alæ anticæ lunula media nulla areæ mediæ dimidio apicali albo. Dodonæa, *Wien. Verz.*

1. Drymonia Querna.

Alæ cano-cinereæ, fasciis tribus undatis albis nigro marginatis, lunulaque media alba; posticæ albæ.

Chaonia Querna, *Steph. Ill. Brit. Ent. Haust.* ii. 31, 3.
Bombyx Querna, *Wien. Verz.* 49. *Fam.* A. 5. *Fabr. Mant. Ins.* ii. 122, 121; *Ent. Syst.* iii. 449, 131. *Gmel. ed. Syst. Nat.* i. 5, 2432, 557. *Illig. N. Ausg. dess.* i. 59, 5; *Mag.* ii. 45, 5. *Scriba, Beitr.* ii. 73, pl. 7, f. 4. *Oliv. Enc. Méth.* v. 73, 166. *Hübn. Bomb.* 104, 3, pl. 3, f. 9. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. a. f. 1. *Borkh. Eur. Schmett.* iii. 435, 163; *Rhein. Mag.* i. 372, 232.
Notodonta Querna, *God. Lép. de France*, iv. 220, pl. 20, f. 1. *Ochs. Schmett. von Eur.* iii. 84, 19.
Drymonia Querna, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Dimorphæ Noctuæformes*), 144, 1533. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 122, 19, 1.
——— ———, *Pap. d'Eur.* iv. 64, pl. 128, f. 173.

a, *b*. Europe. From M. Becker's collection.
c. Europe.

2. Drymonia Chaonia.

Alæ anticæ cinereæ, strigis duabus undatis albis, lunulaque media nigra.

Chaonia Roboris, *Steph. Ill. Brit. Ent. Haust.* ii. 30, 1.
Noctua Roboris, *Fabr. Sp. Ins.* ii. 217, 47; *Mant. Ins.* ii. 144, 69; *Ent. Syst.* iii. 35. *Gmel. ed. Syst. Nat.* i. 5, 2551, 1082. *Stew. El. Nat. Hist.* ii. 185. *Turt. Syst. Nat.* iii. 307.
Phalæna Roboris, *Don. Nat. Hist. Brit. Ins.* ix. 25, pl. 299.
Bombyx Roboreus, *Haw. Lep. Brit.* 104.
Drymonia chaonia, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Dimorphæ Noctuæformes*). *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 122, 20, 2..
Bombyx chaonia, *Wien. Verz.* 49. *Fam.* A. 7. *Illig. N. Ausg. dess.* i. 60, 7. *Vieweg, Tab. Verz.* i. 43, 26. *Borkh. Eur. Schmett.* iii. 433, 162; *Rhein. Mag.* i. 371, 231. *Lang. Verz.* ii. 84, 655, 556. *Brahm, Ins. Kal.* 178, 86. *Oliv. Enc. Méth.* v. 73, 168. *Hübn. Bomb.* 104, 4, pl. 3, f. 10, 11; *Larv. Lep.* iii. *Bomb.* i. *Sphing.* C. a. f. 2. *God. Lép. de France*, iv. 218, pl. 20, f. 6.
Bombyx Roboris, *Fabr. Sp. Ins.* ii. 217, 47; *Mant. Ins.* ii. 144, 69; *Ent. Syst.* iii.. *Gmel. ed. Syst. Nat.* i. 5, 2551, 1082. *Esp. Schm.* iii. 243, pl. 46, f. 4—7. *Schwarz, Raup.* 407, 235.
Phalæna confusa, *Hufnagel, Tab. in Berl. Mag.* 3, 4, 94.
Bombyx bistrigata? *Borkh. Eur. Schm.* ii. 436, 164. *Scriba, Beitr.* ii. 69, pl. 7. f. 1.
Notodonta chaonia, *Ochs. Schm. Eur.* iii. 82, 18.
——— ———, *Röes. Ins. Bel.* i. 2, 270, pl. 50, f. 1—4. *Pap. d'Eur.* iv. 65, pl. 128, f. 174.

a—d. England. From Mr. Stephens' collection.
e, f. England.
g, h. Europe. From M. Becker's collection.

3. Drymonia dodonæa.

Alæ anticæ obscure cinereæ fascia alba, strigis duabus undatis albis, maculaque apicis nigra tripartita.

Chaonia dodonæa, *Steph. Ill. Brit. Ent. Haust.* ii. 30, 2. *Duponch.*
Bombyx dodonæa, *Wien. Verz.* 49. *Fam.* A. 6. *Illig. N. Ausg. dess.* i. 60, 6. *Mag.* ii. 45, 6. *Oliv. Enc. Méth.* v. 73, 167. *Hübn. Bomb.* 104, 2, pl. 3, f. 8. *Larv. Lep.* iii. *Bomb.* 1. *Sphing.* C. c. f. 1.

Bombyx Ilicis, *Fabr. Syst. Ent.* iii. 434, 84.
God. Lép. de France, iv. 216, pl. 20, f. 5.
Bombyx trimacula, *Esp. Schmett.* iii. 242, pl. 46, f. 1—3.
Bombyx tripartita, *Borkh. Eur. Schmett.* iii. 424, 158. *Brahm, Ins. Kal.* 179, 87.
Bombyx bistrigata? *Scriba, Beitr.* ii. 69, pl. 7, f. 1. *Borkh. Eur. Schm.* iii. 436, 164.
——— ———, *Pap. d'Eur.* v. 57, pl. 187, f. 243.
Phalæna trimacula, *Don. Nat. Hist. Brit. Ins.* x. 71, pl. 352, f. 2.
Bombyx dodonæus, *Haw. Lep. Brit.* 104.
Var. Bombyx Querneus, *Haw. Lep. Brit.* 104.
Notodonta dodonæa, *Ochs. Schmett. von Eur.* iii. 80, 17.
Drymonia dodonæa, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Dimorphæ Noctuæformes*), 145, 1534. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 122, 21, 3.

a—k. England. From Mr. Stephens' collection.
l—o. England.
p, q. Europe. From M. Becker's collection.

Genus 15. NADIASA.

Corpus robustum, pilosum. Proboscis brevissima. Palpi breves, porrecti, pilosi, caput paullo superantes; articulus 3us minutus, conicus. Antennæ thorace breviores. Abdomen alas posticas vix superans. Pedes validi, pilosi; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ longiusculæ, mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore perobliquo. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ serratæ.

Body stout, pilose. Proboscis very short. Palpi pilose, short, porrect, extending a little beyond the head; third joint minute, conical. Antennæ shorter than the thorax. Abdomen extending very little beyond the hind wings. Legs stout, pilose; hind tibiæ with two minute apical spurs. Wings moderately broad, rather long. Fore wings straight along the costa, rounded at the tips, very oblique along the exterior border; interior angle much rounded; discal areolet not intersected; three inferior veins; first and second nearly contiguous; third rather remote; submedian and internal veins distinct. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ serrated.

1. NADIASA CONCOLOR.

Mas. *Albida; palpi, antennæ thoracisque latera lutea; pectus et pedes ferruginea; alæ rufo-cervinæ, posticæ subtus apud costam albidæ.*

Male. Whitish. Palpi and antennæ luteous. Thorax luteous on each side. Pectus and legs ferruginous. Wings reddish fawn-colour. Hind wings whitish beneath along the costa. Length of the body 6 lines; of the wings 18 lines.

a. South Africa. Presented by Dr. A. Smith.

2. NADIASA PARVIGUTTA.

Mas. *Pallide ferrugineo-cana; palpi et antennæ nigra; tarsi nigri fasciis canis; alæ anticæ fasciis duabus linearibus indistinctis perobliquis fuscescentibus guttisque exterioribus luteis nigro signatis.*

Male. Pale ferruginous hoary. Palpi, antennæ and tarsi black, the latter with hoary bands. Fore wings more ferruginous along the apical half of the costa, with two slender indistinct irregular very oblique pale brownish bands, beyond which there is an undulating row of luteous dots, most of them marked with black; a few similar dots are indistinctly apparent on the hind wings. Length of the body 7 lines; of the wings 18 lines.

a. Australia. Presented by H. G. Harrington, Esq.

Genus 16. CETOLA.

Mas. Corpus pilosum, sat robustum. Proboscis non conspicua. Palpi porrecti, pilosi, caput paullo superantes; articulus 2us 1o duplo longior; 3us parvus, conicus. Antennæ subpectinatæ, corporis dimidio æquales. Thorax cristatus. Abdomen basim versus cristatum, alas posticas paullo superans. Pedes sat validi, subpilosi; tibiæ posticæ calcaribus quatuor sat longis. Alæ anticæ angustæ, apud costam rectæ, apice rotundatæ, margine exteriore denticulato et perobliquo.

Male. Body pilose, moderately stout. Proboscis very short, not apparent. Palpi porrect, pilose, extending a little beyond the head; second joint full twice the length of the first; third short, conical. Antennæ minutely pectinated, about half the length of the body. Thorax crested in front and behind. Abdomen crested at

one-third of its length, extending for one-fourth of its length beyond the hind wings. Legs rather stout, slightly pilose; hind tibiæ with four moderately long spurs. Fore wings narrow, straight in front, rounded at the tips, scalloped and very oblique along the exterior border; second inferior vein a little nearer to the third than to the first; third about six times further from the fourth than from the second.

1. CETOLA DENTATA.

Mas. *Fulva; thorax albido-testaceus, fusco cristatus; abdomen basi testaceum, nigro cristatum; alæ anticæ testaceæ, apud costam fuscæ, margine interiore ferrugineo, disco apicem versus fusco substrigato, macula discali albida; posticæ albidæ.*

Male. Tawny. Thorax whitish testaceous; crests brown. Abdomen testaceous at the base; crest black. Fore wings testaceous, dark brown along the costa; interior border ferruginous; disk towards the tip slightly streaked with brown; a whitish discal mark joining the brown in front by the discal areolet; the scallops on the exterior border increasing in size from the tip to the interior angle; under side whitish, partly ferruginous along the borders, with an oblique brown mark in front by the discal areolet. Hind wings whitish; under side like that of the fore wings. Length of the body 5 lines; of the wings 14 lines.

a. Nepaul. Presented by E. Doubleday, Esq.

Genus 17. RAMESA.

Fœm. Corpus sat gracile. Proboscis non conspicua. Palpi graciles, porrecti, pubescentes, breviusculi, caput vix superantes; articulus 2us 1o plus duplo longior; 3us conicus, minimus. Antennæ graciles, simplices, corporis dimidio breviores. Thorax antice cristatus. Abdomen alas posticas paullo superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ anticæ sat latæ, apud costam vix convexæ, apice subangulatæ, margine exteriore integro subobliquo.

Female. Body rather slender. Proboscis very short, not apparent. Palpi slender, pubescent, porrect, rather short, extending very little beyond the head; second joint more than twice longer than the first; third conical, very minute. Antennæ slender, simple, less than half the length of the body. Thorax with a crest in front. Abdomen extending for one-fourth of its length beyond the hind wings. Legs rather slender; hind tibiæ with four moderately long spurs. Fore wings moderately broad, hardly convex along the

costa, somewhat angular at the tips, a little oblique and not scalloped along the exterior border; first and second inferior veins contiguous beneath; third rather remote.

1. RAMESA TOSTA.

Fœm. *Fusca; antennæ et abdomen testacea; thorax fulvo varius; alæ anticæ fulvæ, disco testaceæ, apud costam nigro-fuscæ, cano strigatæ, guttis exterioribus nigris; posticæ pallide cinereæ.*

Female. Brown. Antennæ and abdomen testaceous. Crest and scapulæ of the thorax somewhat tawny. Fore wings tawny, testaceous in the disk, blackish brown along the costa to two-thirds of the length; two or three hoary streaks between the discal areolet and the exterior border; a row of black dots along the exterior border parallel to another row in the disk at half the distance between the exterior border and the discal areolet; under side and the hind wings pale cinereous. Length of the body 6 lines; of the wings 14 lines.

a. North India. From Mr. L. James' collection.

Genus 18. XENIARA.

Mas. Corpus robustum. Proboscis inconspicua. Palpi mediocriter longi, porrecti, pilosi, caput paullo superantes; articulus 3us minutus, conicus. Antennæ mediocriter pectinatæ, thorace æquales. Abdomen alas posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus minutis apicalibus. Alæ latiusculæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo.

Male. Body stout. Proboscis not visible. Palpi porrect, pilose, moderately long, extending a little beyond the head; third joint minute, conical. Antennæ moderately pectinated, as long as the thorax. Abdomen extending as far as the hind wings. Legs stout, pilose; hind tibiæ with minute apical spurs. Wings rather broad. Fore wings straight in front, rounded at the tips, oblique along the exterior border; interior angle much rounded; third superior vein forked near its base; discal areolet intersected by a secondary vein; three inferior veins; first and second contiguous at the base; third remote. Costa of the hind wings very convex near the base.

1. Xeniara sobria.

Mas. *Pallide fusca; alæ anticæ fasciis obliquis undulosis diffusis albidis, macula discali transversa obscure fusca; posticæ apud costam albido conspersæ.*

Male. Pale brown. Fore wings with whitish flecks, which form oblique undulating diffuse bands; a dark brown transverse discal spot. Hind wings with whitish flecks along the costa. Length of the body 6 lines; of the wings 16 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

Genus 19. ANODONTA.

Corpus robustum. Proboscis non conspicua. Palpi graciles, longiusculi, porrecti, caput superantes; articulus 3us 2i dimidio longior. Antennæ thorace paullo longiores. Abdomen alas posticas superans. Pedes validi; tibiæ late ciliatæ, posticæ calcaribus quatuor sat longis. Alæ sat longæ et angustæ; anticæ longi-fusiformes, apud costam vix convexæ, apice subacuminatæ, margine exteriore perobliquo, anteriore subexcavato. *Mas.*—Antennæ subpectinatæ. Abdomen longius. *Fœm.*—Antennæ simplices. Abdomen brevius.

Anodonta, *Boisd.; Herr.-Schæff. Lep. Exot. Sp. Ser.* i.

Body stout. Proboscis not apparent. Palpi slender, rather long, porrect, extending some distance beyond the head; third joint linear, more than half the length of the second. Antennæ a little longer than the thorax. Legs stout; tibiæ deeply ciliated; hind tibiæ with four moderately long spurs. Wings rather long and narrow. Fore wings elongate-fusiform, hardly convex in front, slightly acuminated at the tips, extremely oblique along the exterior border; interior border slightly excavated; discal areolet intersected by a secondary vein; three inferior veins; first and second contiguous at the base; third rather remote. *Male.*—Antennæ slightly pectinated. Abdomen extending for one-third of its length beyond the hind wings. *Female.*—Antennæ simple. Abdomen extending for one-fourth of its length beyond the hind wings.

1. Anodonta combusta.

Mas et fœm. *Cervina; thorax fusco fasciatus et vittatus; alæ anticæ striga basali margineque intersecto fuscis, posticæ apud angulum interiorem fuscescentes testaceo signatæ.*

Anodonta combusta, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* i. pl. 18, f. 81, 82.

Male and female. Fawn-colour. Thorax with a brown band and a brown stripe. Fore wings with a basal discal brown streak and an intersected brown border. Hind wings brown with a testaceous streak by the interior angle.

Var. β. Mas. *Thorax fuscus, antice pallide cervinus; abdomen et alæ posticæ cinerea; alæ anticæ fuscæ, apud costam pallide cervinæ.*

Male. Thorax brown, pale fawn-colour in front. Abdomen and hind wings cinereous. Fore wings brown, pale fawn-colour towards the costa.

a. Brazil. From M. Becker's collection.
b. Brazil. From Mr. Mornay's collection.
c. Rio Janeiro. From Mr. Stevens' collection.

Genus 20. STAUROPUS.

Corpus sat robustum. Proboscis brevissima. Palpi breves, porrecti, pilosi, caput paullo superantes; articulus 3us minimus. Antennæ corporis dimidio breviores. Thorax non cristatus. Abdomen alas posticas dimidio superans. Pedes pilis longis vestiti; tibiæ posticæ calcaribus duobus apicalibus sat longis. Alæ longiusculæ, sat angustæ; anticæ tuberculis elevatis, apud costam convexæ, apice rotundatæ, margine exteriore perobliquo. *Mas.*—Antennæ sat late pectinatæ, apice serratæ. *Fœm.*—Antennæ simplices.

Stauropus, *Germar; Steph. Ill. Brit. Ent. Haust.* ii. 21; *Herr.-Schæff.*
Bombyx, p., *Linn.; Fabr.; Gmel.; Oliv.; Schr.; Esp.; Borkh.; Hübn.; Haw.; God.*
Harpyia, p., *Ochs.; Duponch.*
Terasion, *Hübn. Verz. Schmett.* 147.

Body moderately stout. Proboscis very short. Palpi short, porrect, pilose, extending a little beyond the head; third joint very small. Antennæ less than half the length of the body. Abdomen extending for about half its length beyond the hind wings. Legs clothed with long hairs; hind tibiæ with moderately long apical spurs. Wings rather long and narrow. Fore wings convex along the costa, rounded at the tips; exterior border very oblique; first and second inferior veins contiguous at the base; third remote. *Male.*—Antennæ rather deeply pectinated to five-sixths of the

length, serrated from thence to the tips. *Female.*—Antennæ simple.

1. Stauropus Fagi.

Alæ rufescente-cinereæ; anticæ fasciis duabus linearibus luteis flexuosis, serieque punctorum elevatorum nigrorum.

Stauropus Fagi, *Steph. Ill. Brit. Ent. Haust.* ii. 21, 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 120, 16, 1.

——— ———, *Mouffet, Theat.* 197, 198. *Albin, Nat. Hist. Engl. Ins.* pl. 58. *Röes. Ins.* iii. pl. 12. *Act. Holm.* 1749, 132, pl. 4, f. 10—14.

Bombyx Fagi, *Linn. Syst. Nat.* ii. 816. *Faun. Suec.* ed. 2, 295, 1113. *Fabr. Sp. Ins.* ii. 175, 38; *Mant. Ins.* ii. 111, 45; *Ent. Syst.* iii. 1, 422, 51. *Wien. Verz.* 63, *Fam.* S, 2. *Gmel. ed. Syst. Nat.* i. 5, 2413, 30. *Müll. Faun. Fridr.* 39, 357; *Zool. Dan.* 117, 1356. *Illig. N. Ausg. dess.* i. 149, 2. *Don. Nat. Hist. Brit. Ins.* xii. pl. 328. *Stew. El. Nat. Hist.* ii. 147. *Turt. Syst. Nat.* iii. 200. *Esp. Schmett.* iii. 105, pl. 20, f. 1—7. *Knoch, Beitr.* ii. 58, 8, 134, pl. 3, 7, f. 8—10. *Fuessl, Schw. Ins.* 34, 698. *Borkh. Eur. Schmett.* iii. 382, 142; *Rhein. Mag.* i. 384, 253. *Oliv. Enc. Méth.* v. 40, 66. *Vieweg, Tab. Verz.* i. 40, 22. *Schr. Faun. Boic.* ii. 1, 290, 1480. *Lang. Verz.* ii. 113, 844, 845. *Hübn. Bomb.* 110, 1, pl. 8, f. 31. *Larv. Lep.* iii. *Bomb.* i. *Sphing.* D, f. 1. *Brahm. Ins. Kal.* 536, 397. *Schwarz, Raup.* 517, 674. *God. Lép. France*, iv. 173, pl. 15, f. 1.

Bombyx Fagus, *Haw. Lep. Brit.* 85.

Terasion Fagi, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Sartæ*) 147, 1555.

——— ———, *Röes. Ins. Bel.* iii. 69, pl. 12. *Pap. d'Eur.* v. 122, pl. 203, f. 270.

Harpyia Fagi, *Ochs. Schmett. Eur.* iii. 59, 7. *Duponch. Suppl. Pseudo-Bomb.* pl. 6, f. 1—4.

a—*c*. England. From Mr. Stephens' collection.
d—*f*. England.
g—*j*. Europe. From M. Becker's collection.
k—*m*. Europe.

2. Stauropus alternus.

Fœm. *Cana; palpi nigricantes, apice albidi; antennæ fulvæ; alæ anticæ ferrugineo conspersæ, subtus fuscescentes; posticæ fuscescentes, fascia exteriore ferrugineo-fusca albido marginata.*

Female. Hoary. Palpi blackish, with whitish tips. Antennæ tawny. Fore wings with minute ferruginous flecks; some ferruginous marks towards the tips; under side mostly brownish. Hind wings brownish, whitish beneath towards the base; a slender ferruginous-brown whitish bordered band along the exterior margin. Length of the body 8 lines; of the wings 26 lines.

a. Ceylon. Presented by R. Templeton, Esq.
b. Silhet. From Mr. Stainforth's collection.

Genus 21. LISTOCA.

Mas. Corpus robustum. Proboscis non conspicua. Palpi validi, porrecti, pilosissimi, caput superantes; articulus 3us parvus, conicus. Antennæ breviter pectinatæ, thorace non longiores. Abdomen alas posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ mediocriter latæ et longæ; anticæ apud costam fere rectæ, apice rotundatæ, margine exteriore obliquo, interiore recto basim versus fasciculato.

Male. Body stout. Proboscis not visible. Palpi stout, porrect, very pilose, extending a little beyond the head; third joint small, conical. Antennæ slightly pectinated, as long as the thorax. Abdomen extending as far as the hind wings. Legs stout, pilose; hind tibiæ with two short apical spurs. Wings moderately long and broad. Fore wings nearly straight along the costa, rounded at the tips, oblique and entire along the exterior border; interior border straight, slightly tufted towards the base; three inferior veins; first and second nearly contiguous at the base; third remote.

1. Listoca lignaria.

Mas. *Pallide cinerea, cervino vittata; alæ anticæ basi costali et apud discum cervinæ, lineis duabus obliquis angulosis guttisque exterioribus fuscis, macula postica fuscescente.*

Male. Pale cinereous. Body with a somewhat fawn-coloured stripe. Fore wings partly fawn-colour along the costa at the base and in the disk; two brown oblique zigzag lines, and an exterior row of brown dots; a brown spot at two-thirds of the length of the exterior border; fringe with brown spots opposite the veins. Hind wings with a very pale brown spot by the interior angle. Length of the body 6—7 lines; of the wings 16—18 lines.

a, b. Sydney. From Mr. Lambert's collection.

Genus 22. PEROMA.

Mas. Corpus gracile. Caput et thorax pilosa. Proboscis capitis latitudine æqualis. Palpi porrecti, sat graciles, caput paullo superantes; articulus 2us 1o paullo longior; 3us minimus. Antennæ corpore paullo breviores, dimidio basali mediocriter pectinatæ, apices versus simplices. Abdomen alas posticas superans. Pedes sat graciles; femora et tibiæ pilosa; tibiæ posticæ calcaribus quatuor sat longis. Alæ sat angustæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore perobliquo.

Male. Body slender. Head and thorax pilose. Proboscis distinct, not shorter than the breadth of the head. Palpi porrect, rather slender, extending some little distance beyond the head; second joint a little longer than the first; third very minute. Antennæ about three-fourths of the length of the body, moderately pectinated to nearly half the length, simple from thence to the tips. Abdomen extending for one-third of its length beyond the hind wings. Legs rather slender; femora and tibiæ pilose; hind tibiæ with four moderately long spurs. Wings rather narrow. Fore wings straight along the costa, nearly rectangular at the tips, very oblique along the hinder two-thirds of the length of the exterior border; interior border with a semi-elliptical excavation at its end; three inferior veins; second about four times further from the third than from the first.

1. Peroma anomala.

Mas. *Alba; palpi apice fusci; thorax testaceo suffusus; abdomen et tarsi testacea; alæ anticæ e guttis fuscis bifasciatæ, marginibus subtestaceis.*

Male. White. Palpi with brownish tips. Antennæ with brownish branches. Thorax with a slight testaceous tinge. Abdomen and tarsi testaceous. Fore wings with a slight testaceous tinge about the borders, and with two bands of black dots, near and almost parallel to the exterior border. Length of the body 7 lines; of the wings 15 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 23. HETEROCAMPA.

Div. I.

Corpus robustum. Proboscis brevis. Palpi mediocriter longi, oblique ascendentes; articulus 2us 1o multo longior; 3us minimus.

Pedes sat graciles; tibiæ posticæ calcaribus quatuor longiusculis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo vix denticulato. *Mas.*—Antennæ sat late pectinatæ, apices versus simplices. Abdomen alas posticas superans. Tibiæ anticæ lobatæ. *Fœm.*—Antennæ simplices, graciles. Abdomen alas posticas paullo superans.

Heterocampa, *Doubleday, Entomologist, 55.*

Body stout. Proboscis short, feeble. Palpi of moderate length, obliquely ascending; second joint very much longer than the first; third very minute. Legs rather slender; hind tibiæ with four rather long spurs. Wings moderately broad. Fore wings with three inferior veins; second about thrice further from the third than from the first. *Male.*—Antennæ rather deeply pectinated to about two-thirds of the length. Abdomen extending for one-third of its length beyond the hind wings. Fore tibiæ dilated. *Female.*—Antennæ simple, slender. Abdomen extending for nearly one-fourth of its length beyond the hind wings.

1. Heterocampa Astarte.

Alæ anticæ viridi-cinereæ, strigis transversis lunulaque centrali ferrugineis; macula apicem lunata alba.

Heterocampa Astarte, *Doubleday, Entomologist, 57,* pl. f. 1, 2; larva et pupa.

a. St. John's Bluff, East Florida. Presented by E. Doubleday, Esq.

2. Hetbrocampa umbrata.

Mas. *Ferruginea; thorax antice nigro fasciatus; alæ anticæ lineis nonnullis indeterminatis transversis subobliquis nigricantibus; posticæ canæ fascia margineque cinerascentibus.*

Male. Ferruginous. Thorax with a black band in front. Fore wings with several indistinct transverse slightly oblique undulating blackish lines. Hind wings hoary, grayish along the border, and with a slight discal curved grayish band. Length of the body 9 lines; of the wings 20 lines.

a. St. John's Bluff. East Florida. Presented by E. Doubleday, Esq.

3. Heterocampa varia.

Fœm. *Cinerea; thorax nigro varius; alæ anticæ maculis costalibus et discalibus albidis fasciisque quinque geminis undulosis nigris; posticæ pallide cinereæ, fusco late marginatæ.*

Female. Cinereous. Thorax with blackish marks. Fore wings with some whitish marks along the costa, with a costal subapical short oblique whitish band, and with three discal whitish spots; five irregular undulating black double bands. Hind wings pale gray, with broad brown borders. Length of the body 10 lines; of the wings 24 lines.

a. ———? From Mr. Milne's collection.

Div. II.

Mas. Corpus pilosum, sat validum. Proboscis mediocriter longa. Palpi subascendentes, mediocriter longi, subtus pilosi, caput vix superantes; articulus 2us 1o fere triplo longior; 3us cylindricus, apice rotundatus, 1o paullo brevior, 2o multo gracilior. Antennæ mediocriter pectinatæ, apices versus nudæ, corporis dimidio non breviores. Abdomen alas posticas triente superans. Pedes sat graciles, late ciliatæ; tibiæ anticæ lobatæ; posticæ calcaribus quatuor longiusculis. Alæ sat latæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore obliquo subconvexo.

Lochmœus, *Doubleday, Entomologist*, 57.

Male. Body pilose, moderately stout. Proboscis moderately long. Palpi slightly ascending, moderately long, pilose beneath, extending very little beyond the head; third joint much more than twice the length of the second. Antennæ full half the length of the body, moderately pectinated to a little beyond two-thirds of the length. Abdomen extending for one-third of its length beyond the hind wings. Legs rather slender, deeply ciliated; hind tibiæ with four rather long spurs. Wings moderately broad. Fore wings nearly straight along the costa, rounded at the tips; exterior border oblique, slightly convex; three inferior veins; first and second contiguous at the base; third remote.

4. Heterocampa Manteo.

Alæ anticæ cinereo-fuscæ, strigis numerosis transversis obscurioribus, serie marginali punctorum nigrorum, guttaque centrali alba in qua punctum geminatum nigrum.

Lochmœus Manteo, *Doubleday, Entomologist*, 58, pl. f. 6, larva.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

5. HETEROCAMPA BIUNDATA.

Mas. *Cinereus, viridescens; pectus, abdomen subtus pedesque albida; alæ anticæ maculis basalibus et subapicalibus fasciaque duplici undulosa nigricantibus, necnon fasciis duabus subobliquis undulosis fuscis; posticæ fuscescentes basi subtusque albidæ.*

Male. Cinereous. Head, thorax and fore wings slightly tinged with green. Pectus, abdomen beneath and legs whitish: Fore wings with some blackish marks at the base, and with a double undulating blackish band at one-fourth of the length; two slight oblique and undulating brown bands beyond the middle, and towards the exterior border a more oblique and undulating band of blackish spots; under side grayish, whitish about the borders. Hind wings brownish, whitish towards the base and beneath. Length of the body 9 lines; of the wings 20 lines

a, b. Trenton Falls, New York. Presented by E. Doubleday, Esq.

6. HETEROCAMPA SUBGUTTATA.

Mas. *Cinereus; palpi albidi; alæ anticæ fusco tinctæ, nigro guttatæ, albido plagiatæ et notatæ; posticæ fuscæ, fascia obliqua incompleta discali albida.*

Male. Cinereous. Proboscis tawny. Palpi whitish. Antennæ with black branches. Fore wings tinged with brown, and marked with many black dots, some of which form oblique and imperfect bands on the apical half; a large whitish patch on the interior border before the middle, and some whitish marks about the apical half of the interior border and the hind half of the exterior border; under side brown. Hind wings brown, with a slight diffuse oblique discal whitish band, which is obsolete towards the fore border; ciliæ whitish. Length of the body 7½ lines; of the wings 16 lines.

a. ——— ? From Mr. Milne's collection.

Div. III.

"Proboscis thoracis longitudine. Palpi mediocres, porrecti, triarticulati, dense vestiti; articulus 1us fere cylindricus, arcuatus, apice subincrassatus; 2us cylindricus, vix arcuatus, apice oblique truncatus, 1o dimidio longior; 3us multo gracilior, ovatus, 2i infra apicem insertus, ejus triente brevior. Antennæ *maris* usque ad dimidium bipectinatæ, ramis satissime setosis; *fœminæ* setaceæ.

Thorax dense vestitus, non cristatus; margo anticus fasciculis duobus parvis subconicis antice porrectis et supra caput occurrentibus. Alæ anticæ trigonæ, integræ, sat longæ. Tibiæ anticæ in utroque sexu lobo elongato corneo munitæ; posticæ quadrispinosæ. Abdomen elongatum, vix crassum; fasciculus analis *maris* bifidus, *fœminæ* nullus."

Schizura, *Doubleday, Entomologist*, 59.

7. HETEROCAMPA IPOMÆÆ.

Alæ anticæ ferrugineo-fuscæ, cinereo irroratæ, fascia media indistincta cinerea, stigmate cinereo ferrugineo pupillato, venis apicem versus nigris.

Schizura Ipomææ, *Doubleday, Entomologist*, 60, pl. f. 8; larva.

St. John's Bluff, East Florida.

Div.?

8. HETEROCAMPA? LONGARA.

Mas. *Roseo-cana; abdomen alas posticas plus dimidio superans; alæ anticæ apud costam viridescentes; linea discali nigra.*

Phalæna-Bombyx Longara, *Stoll, Suppl. Cram. Pap. Exot.* 88, pl. 18, f. 3, 3 F. 3 G.

Notodonta Longara, *Hübn. Verz. Schmett.* (*Phalænæ Ptilodontes Inlunatæ*), 146, 1552.

Surinam.

9. HETEROCAMPA? MEGALOPS.

Mas. *Fusca; alæ anticæ obscure fuscæ nigro bifasciatæ, macula discali nigra albo cincta, apud marginem exteriorem testaceæ linea guttulari fusca postice cinerea-nigro late marginata.*

Bombyx megalops, *Anon.; Ins. Surin.* i. pl. 24.

Surinam.

Genus 24. EXAERETA.

Corpus pilosum, sat validum. Proboscis mediocriter longa. Palpi brevissimi, valde pilosi. Antennæ corporis dimidio multo longiores. Abdomen alas posticas dimidio superans. Pedes sat graciles, ciliatæ; tibiæ posticæ calcaribus quatuor longiusculis.

Alæ sat longæ et angustæ; anticæ apud costam rectæ, apice vix angulatæ. *Mas.*—Antennæ mediocriter pectinatæ, apices versus simplices. *Fœm.*—Antennæ simplices.

Exaereta, *Hübn. Verz. Schmett.* 200.
Bombyx, p., *Esp.; Borkh; Fabr.*
Noctua, p., *Wien. Verz.; Illig.; Hübn.*
Harpyia, p., *Ochs.*
Uropus, *Ramb. Ann. Soc. Ent. Fr.* i. 278; *Boisd.; Duponch.; Herr.-Schæff.*

Allied to the *Noctuites*.

Body pilose, rather stout. Proboscis moderately long. Palpi very short and pilose. Antennæ much more than half the length of the body. Abdomen extending for half its length beyond the hind wings. Legs rather slender; femora and tibiæ fringed with long hairs; hind tibiæ with four rather long spurs. Wings long and narrow. Fore wings straight along the costa, hardly angular at the tips; three inferior veins; second more than four times further from the third than from the first. *Male.*—Antennæ moderately pectinated to two-thirds of the length, simple from thence to the tips. *Female.*—Antennæ simple.

1. Exaereta Ulmi.

Cinerea; alæ anticæ venis nigris albo punctatis; posticæ albæ.

Uropus Ulmi, *Ramb. Ann. Soc. Ent. Fr.* i. 278, pl. 8, f. 10, a—c.
Herr.-Schæff. Samml. Eur. Schmett. Suppl. ii. *Text*, 121, 18, 1.
Noctua Ulmi, *Wien. Verz.* 66. *Fam.* A. 1. *Illig. N. Ausg. dess.* i. 163, 1; *Mag.* ii. 76. *Lang. Verz.* ii. 118, 868, 869. *Hübn. Noct.* pl. 1, f. 1; *Larv. Lep.* iv. *Noct.* i. *Bomb.* x. A. B.
Bombyx Ulmi, *Borkh. Eur. Schmett.* iii. 385, 143.
Bombyx cassinia, *Esp. Schmett.* iii. 251, pl. 49, f. 4, 5.
Bombyx discors, *Fabr. Ent. Syst.* iii. 1.
———— ————, *Pap. d'Eur.* v. 89, pl. 194, f. 256. *Suppl.* pl. 7.
Harpyia Ulmi, *Ochs. Schm. Eur.* iii. 36, 6. *Duponchel.*
Exaereta Ulmi, *Hübn. Verz. Schmett.* 200, 2026.

a—d. Europe. From M. Becker's collection.
e—h. Europe.

Genus 25. THIACIDAS.

Mas. Corpus robustum. Proboscis brevissima. Palpi breves, pilosissimi; articulus 2us 1o multo longior; 3us minimus. Antennæ

sat late pectinatæ, apices versus subpectinatæ. Abdomen alas posticas vix superans. Pedes longi; tibiæ posticæ calcaribus longis apicalibus. Alæ sat latæ.

Male. Body stout. Proboscis very short. Palpi short, very hairy; second joint much longer than the first; third very small. Antennæ rather deeply pectinated to half the length, where the branches become abruptly short. Abdomen hardly extending beyond the hind wings. Legs long; hind tibiæ with long apical spurs. Wings moderately broad. Fore wings with the first, second and third inferior veins near together at the base; fourth about four times further from the third than the second is from the first.

1. THIACIDAS POSTICA.

Mas. *Fusco-cinerea, tarsi cani, fasciis nigris; alæ anticæ vitta discali ferruginea, lineisque tribus obliquis undulosis nigris, 1a valde contorta, 3a subduplicata strigifera, litura discali guttisque marginalibus exterioribus; posticæ albidæ, guttis marginalibus unaque discali nigris.*

Male. Brownish gray. Tarsi hoary, with black bands. Fore wings with a ferruginous discal streak and with three oblique slender undulating black stripes; the first much contorted; the second more slightly curved; the third indistinctly double, with more numerous flexures, and emitting some streaks towards the tip of the wing; a slight black mark on the discal areolet, and a row of black dots along the exterior border. Hind wings whitish, with a brown tinge along the inner half of the exterior border, and with a black discal dot and black marginal dots. Length of the body 5 lines; of the wings 15 lines.

a. Nepaul. From Mr. Saunders' collection.

Genus 26. EDEMA.

Corpus sat validum. Palpi graciles, pilosi, caput superantes; articulus 3us lanceolatus. Abdomen alas posticas paullo superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ vix latæ, apud costam rectæ, apice subangulatæ, margine exteriore obliquo et subconvexo. *Mas.*—Palpi ascendentes, longiores. Antennæ subpectinatæ, corporis dimidio longiores. *Fœm.*—Palpi porrecti, breviores. Antennæ simplices, corporis dimidio breviores.

Phalæna, p., *Abbot & Smith.*
Hyboma, p., *Hübn. Verz. Schmett.* 200.

Allied to the *Noctuites*.

Body moderately stout. Proboscis short. Palpi slender, pubescent, extending beyond the head; second joint more than twice the length of the first; third lanceolate, nearly half the length of the second. Abdomen extending a little beyond the hind wings. Legs slender; hind tibiæ with four long apical spurs. Wings moderately broad. Fore wings straight along the costa, almost angular at the tips; exterior border oblique and slightly convex; three inferior veins; first and second contiguous at the base; third remote. *Male.*—Palpi ascending. Antennæ minutely pectinated to beyond five-sixths of the length, more than half the length of the body. *Female.*—Palpi porrect, shorter than those of the male. Antennæ simple, less than half the length of the body.

1. EDEMA ALBIFRONS.

Cristatâ; alæ subcinereæ; anticæ striga marginali angulosa nivea nubeculæ inserta nigræ.

Phalæna albifrons, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 159, pl. 80.

Male. Hoary. Palpi brown above. Thorax with a tawny band near the fore border. Fore wings with various small brown marks, white along the costa for half the length from the tips; the outline of this white part is very irregular, and the adjoining part of the wing behind it is dark brown; a row of short undulating blackish streaks along the exterior border. Length of the body 6 lines; of the wings 15 lines.

a, *b*. Trenton Falls, New York. Presented by E. Doubleday, Esq.

Female. Cinereous. Fore wings thinly covered with black flecks; a brown zigzag band at a little before one-third of the length, and extending from the costa to rather beyond half the breadth of the wing; a large white patch on the fore half of the breadth of the wing between the first band and a second which is brown, oblique, complete, and slightly undulating; beyond the latter there are two slight whitish oblique bands, the first incomplete, the second marginal and intersected by a blackish band. Hind wings pale brown, partially and very thinly flecked with brown, with a brown discal spot, and with a brown oblique slightly undulating band, which is composed of flecks, and corresponds to the second brown band of the fore wings. Length of the body 7 lines; of the wings 20 lines.

a. Nova Scotia. From Lieut. Redman's collection.

2. EDEMA CONCINNA.

Alæ anticæ nebulosæ, litura baseos angulorumque, striis marginalibus, punctoque disci nigricantibus.

Phalæna concinna, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 169, pl. 85.

Male. Pale grayish. Antennæ tawny. Palpi blackish above. Abdomen whitish. Fore wings whitish testaceous, mostly brown along the interior border; a black streak at the base and a black discal dot; some pale brown marks along the exterior border, and a darker one at the tip of the costa. Hind wings white, with a brown mark on the interior angle. *Female.*—Fore wings mostly fawn-colour instead of whitish. Hind wings brown. Length of the body 5—6 lines; of the wings 12—14 lines.

a, *b*. Georgia. From Mr. Milne's collection.

Female. Fawn-colour. Palpi and fore legs brown above. Fore wings cinereous, with black speckles; fawn-colour along the costa for more than half the breadth, and for two-thirds of the length; the fawn-colour is partly and irregularly bordered with brown in front, and between it and the exterior border there are two black spots, which are bordered with fawn-colour on the outer side. Length of the body 6½ lines; of the wings 13 lines.

a. ———?

3. EDEMA UNICORNIS.

Alæ anticæ viridi fuscoque nebulosæ apice lutescentes, litura disci punctis striisque marginalibus nigricantibus.

Phalæna unicornis, *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia*, ii. 171, pl. 86.

Hyboma unicornis, *Hübn. Verz. Schmett.* 200, 2028.

Male. Cinereous. Palpi blackish above, whitish beneath. Antennæ brown. Fore legs mostly brown above. Fore wings whitish, with some slender indistinct and incomplete testaceous bands; disk mostly grayish; a dark brown oblique discal mark; a row of dark brown spots near the exterior border, and others on the fringe. Hind wings whitish. Length of the body 5—6 lines; of the wings 11—13 lines.

a, *b*. Georgia. From Mr. Milne's collection.

4. EDEMA PRODUCTA.

Mas et fœm. *Cinerea; palpi et pedes antici supra nigro-fusci; thorax fusco bifasciatus; alæ anticæ fusco subnebulosæ, fasciis duabus angustis ramosis strigisque exterioribus nigris, macula apicali alba; posticæ fuscæ, subtus albidæ fasciis guttulari-bus fuscis.*

Male and female. Cinereous. Palpi above blackish brown. Antennæ brown. Thorax with two brown bands. Legs whitish; fore legs above blackish brown. Fore wings slightly mottled with brown, and with two irregular black slender bands; the first emitting a branch from its middle towards the base of the wing; the second emitting two branches to the fore part of the exterior border; a white apical spot, a whitish spot at the base, and some black streaks along the exterior border. Hind wings brown, with a whitish fringe; under side whitish, with two or three bands of brown dots. Length of the body 5—6 lines; of the wings 11—12 lines.

a. St. John's Bluff, E. Florida. Presented by E. Doubleday, Esq.
b. Jamaica. From Mr. Gosse's collection.
c. Honduras. From Mr. Dyson's collection.

Var. β. Mas. *Cinereo-fusca; abdomen albido tinctum; alæ anticæ albido variæ, vitta una fasciis duabus strigaque fuscis; posticæ ferrugineo-fuscæ, albido ciliatæ.*

Male. Cinereous-brown. Abdomen with a whitish tinge. Fore wings tinged with a shining whitish hue, which is indistinctly mottled, and is interrupted by a brown stripe in front and by two oblique brown bands, also by an undulating brown streak adjoining the outer brown band. Hind wings ferruginous-brown, with a white fringe. Length of the body 5 lines; of the wings 10 lines.

a. Honduras. From Mr. Dyson's collection.

5. EDEMA FUSCESCENS.

Mas et fœm. *Cervina, nigro conspersa; thorax anticus, pectus pedesque albida; alæ anticæ fusco variæ, nigro trifasciatæ; lunulis exterioribus fasciaque subapicali nigris; posticæ fuscæ, albido ciliatæ.*

Male and female. Fawn-colour, with blackish speckles. Palpi pale testaceous beneath. Antennæ brown. Thorax in front, pectus and legs mostly whitish. Fore wings indistinctly mottled with

brown, and with three slender black bands; the first band more regular than the second and third, which are double; the second zigzag; the third with fewer angles; a row of black lunules along the exterior border, and a black subapical spot. Hind wings brown, with a whitish fringe, paler and with brown marks beneath. Length of the body 5½ lines; of the wings 11 lines.

a—*e*. Honduras. From Mr. Miller's collection.

Genus 27. MOSARA.

Corpus sat gracile. Proboscis capitis latitudine æqualis. Palpi longi, validi, porrecti, subtus pilosi, caput superantes; articulus 3us longiconicus, parvus. Antennæ corporis dimidio longiores. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longissimis. Alæ sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo. *Mas.*—Antennæ mediocriter pectinatæ, apices versus nudæ. Abdomen attenuatum, alas posticas triente superans. *Fœm.*—Antennæ simplices. Abdomen alas posticas vix superans.

Resembles some of the *Pyralites*. Body rather slender. Proboscis distinct, as long as the breadth of the head. Palpi long, stout, porrect, pilose beneath, projecting some distance beyond the head; third joint small, elongate-conical. Antennæ more than half the length of the body. Legs rather slender, hind tibiæ with four very long spurs. Wings rather narrow. Fore wings straight along the costa, rounded at the tips, oblique along the exterior border; interior angle rounded; discal areolet intersected by a secondary vein; first and second inferior veins nearly contiguous; third much further from the fourth than from the second. *Male.*—Antennæ moderately pectinated to two-thirds of the length. Abdomen tapering, extending for one-third of its length beyond the hind wings. *Female.*—Antennæ simple. Abdomen extending very little beyond the hind wings.

1. Mosara apicalis.

Mas. *Testacea; caput, palpi et thorax antice ferrugineo-fusca; abdomen maculis lateralibus apiceque fuscis; alæ anticæ obscure fuscæ, strigis paucis transversis rufescentibus et nigricantibus fasciaque gracili angulosa ramosa subapicali nigricante testaceo marginata; posticæ pallide fuscæ, basi albido-testaceæ.*

Male. Testaceous. Head, palpi and fore part of the thorax mostly ferruginous-brown. Antennæ testaceous, with brown branches. Abdomen brown at the tip, and with brown spots along each side. Fore wings dark brown, with a few slight transverse reddish and blackish streaks, and with a slender zigzag subapical blackish testaceous-bordered band, which here and there emits short blackish streaks towards the exterior border; under side testaceous, shining. Hind wings pale brown, whitish testaceous towards the base. Length of the body 6½ lines; of the wings 11 lines.

a. North India. From Mr. L. James' collection.

Genus 28. NEOLA.

Corpus robustum. Caput bifasciculatum. Proboscis capitis latitudine paullo longior. Palpi robusti, porrecti, pilosi, caput vix superantes; articulus 3us parvus, conicus. Antennæ thorace longiores. Thorax cristatus. Abdomen alas posticas paullo superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore perobliquo. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ simplices.

Body stout. Head with a tuft on each side in front. Proboscis a little longer than the breadth of the head. Palpi stout, porrect, pilose, extending very little beyond the head; third joint small, conical. Antennæ longer than the thorax. Thorax crested above, tufted on each side behind. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout; femora and tibiæ pilose; hind tibiæ with four long spurs. Wings rather long, moderately broad. Fore wings straight along the costa, rounded at the tips, very oblique along the exterior border; interior angle rounded; discal areolet intersected by a secondary vein; three inferior veins; second much further from the third than from the first. *Male.*—Antennæ moderately pectinated, bare at the tips. *Female.*—Antennæ simple.

1. NEOLA SEMIAURATA.

Cinereo-nigra; abdomen aureo-flavum; tarsi albido fasciati; alæ anticæ albido conspersæ et bimaculatæ; posticæ aureo-flavæ, fusco marginatæ.

Blackish. Head and thorax with some cinereous and brown hairs. Proboscis and antennæ tawny. Abdomen and hind wings gilded yellow, the latter slightly bordered with brown. Tibiæ and tarsi pale beneath; tarsi with whitish bands. Fore wings tinged

with gray and with various whitish flecks, which form a large spot by the interior angle, and another towards the middle of the exterior border; under side pale brownish yellow. Length of the body 10—12 lines; of the wings 24—30 lines.

a—e. Van Dieman's Land. Presented by R. Butler, Esq.
f—h. Van Dieman's Land. Presented by Morton Allport, Esq.
i. New South Wales. From Mr. Wood's collection.
j. Sydney. From Mr. Lambert's collection.

Genus 29. SORAMA.

Fœm. Corpus sat robustum. Caput et thorax plumis clavatis vestita. Proboscis capitis latitudine non longior. Palpi pilosissimi, caput non superantes; articulus 3us obtusus, brevissimus. Antennæ simplices. Abdomen alas posticas triente superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor sat longis. Alæ longæ, sat angustæ; anticæ apud costam subconvexæ, apice vix acuminatæ, margine exteriore denticulato et subobliquo.

Female. Body moderately stout. Head and thorax clothed with stout erect clavate plumes. Proboscis distinct, not longer than the breadth of the head. Palpi very pilose, not extending beyond the head; second joint much longer than the first; third obtuse and very short. Antennæ simple, very minutely serrated towards the base, about half the length of the body. Abdomen with smooth hairs, extending for one-third of its length beyond the hind wings. Legs stout, pilose; hind tibiæ with four moderately long spurs. Wings long, rather narrow. Fore wings slightly convex along the costa, hardly acuminated at the tips, very oblique and slightly scalloped along the exterior border; three inferior veins; second as near to the third as to the first.

1. Sorama bicolor.

Fœm. Ferruginea; thorax nigro varius; pectus et pedes fulva; abdomen et alæ posticæ testacea; alæ anticæ fusco conspersæ fasciisque nonnullis indistinctis perobliquis testaceis.

Female. Ferruginous. Thorax with a lappet on each side. Vertex and thorax mostly covered with black hairs. Pectus and legs tawny. Abdomen and hind wings testaceous. Fore wings thickly flecked with brown plumes, which are darkest towards the base of the interior border, and with some slender indistinct zigzag and very oblique testaceous bands; under side testaceous. Length of the body 12 lines; of the wings 19 lines.

a. Van Dieman's Land. From Mr. A. J. Smith's collection.

Genus 30. BRACHIONYCHA.

Corpus sat robustum. Proboscis non conspicua. Palpi porrecti, validi, pilosi, caput non superantes; articulus 3us minutus, conicus. Antennæ thorace multo longiores. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ simplices, vix serratæ.

Brachionycha, *Hübn. Verz. Schmett.* 144.
Petasia, *Steph. Ill. Brit. Ent. Haust.* ii. 31.
Bombyx, p., *Wien. Verz.; Hübn.; Haw.; Esp.*
Xylina, p., *Treit.*
Brachiomyx, *Meig.*
Asteroscopus, *Boisd.; Duponch.*

Body moderately stout. Proboscis not visible. Palpi stout, pilose, porrect, extending as far as the head; third joint minute, obtuse. Antennæ much longer than the thorax. Abdomen extending for about one-third of its length beyond the hind wings. Legs stout; hind tibiæ with four rather long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, oblique along the exterior border; interior angle much rounded; discal areolet intersected by a slight secondary vein; first, second and third inferior veins near together at the base; fourth rather remote. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ simple, hardly serrated.

1. Brachionycha cassinea.

Alæ cinereæ; anticæ lineolis sparsis atris; posticæ margine fusco punctato.

——— ———, *Röes. Ins.* iii. pl. 40.
Bombyx cassinea, *Fabr. Mant. Ins.* ii. 126, 148. *Ent. Syst.* iii. 1, 460, 164. *Gmel. ed. Syst. Nat.* i. 5, 2423, 529. *Wien. Verz.* 61, P. 1. *Borkh. Schmett.* iii. 442, 169. *Hübn. Bomb.* 2, f. 76.
Bombyx Sphinx, *Esp. Schmett. Bomb.* iii. pl. 49, f. 1—3.
Phalæna-Bombyx cassinea, *Don. Nat. Hist. Brit. Ins.* xii. 4, pl. 397, f. 2.
Bombyx cassineus, *Haw. Lep. Brit.* 100.
Xylina cassinea, *Treit. Schmett. von Eur.* v. 3, 53, 21. *Duponchel, Lép. de France*, vii. pl. 114, f. 2.
Brachionyx cassinea, *Meig. Handb.* 176, 74; *Syst. Beschr. Eur. Schmett.* iii. 178, 1, pl. 109, f. 7.

Brachionycha cassinea, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Dimorphæ Noctuæformes*), 144, 1528.
Petasia cassinea, *Steph. Ill. Brit. Ent. Haust.* ii. 32, 1. *Westw. & Humph. Brit. Moths*, i. 70, pl. 14, f. 7, 8.
Asteroscopus cassinea, *Boisd. Ind. Méth.* 59. *Duponch. Cat. Méth. Lép.* 89.

a—g. England. From Mr. Stephens' collection.
h—k. England.
l, *m*. Europe. From M. Becker's collection.
n. France.

2. BRACHIONYCHA NUBECULOSA.

Cinerea; abdomen fuscum; alæ anticæ cinereo fuscoque nebulosæ atroque parum undatæ, in medio lineola abbreviata nivea atro utrinque marginata, subtus cinereæ disco fusco; posticæ subtus albidæ macula centrali fusca.

Bombyx centrolinea, *Fabr. Mant. Ins.* ii. 126, 149. *Ent. Syst.* iii. 1, 460, 165. *Gmel. ed. Syst. Nat.* i. 5, 2423, 530. *Borkh. Schmett.* iii. 440, 168; 444, 170. *Esp. Schmett.* iii. pl. 48, f. 6.
Bombyx Sphinx, *Hübn. Bomb.* pl. 2, f. 3, 4.
Xylina centrolinea, *Treit. Schmett.* v. 3, 55, 22. *Duponch. Pap. de France*, vii. pl. 114, f. 1.
Brachionyx nubeculosa, *Meig. Syst. Beschr. Eur. Schmett.* iii. 179, pl. 109, f. 8.
Brachionycha nubeculosa, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Dimorphæ Noctuæformes*), 144, 1527.

a, *b*. Europe. From M. Becker's collection.

Genus 31. CLEAPA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi validi, pilosi, porrecti, caput perpaullo superantes; articulus 3us conicus, acutus. Antennæ mediocriter pectinatæ, thorace paullo longiores. Abdomen alas posticas vix superans. Pedes validi; tibiæ posticæ calcaribus quatuor longis. Alæ latæ; anticæ apud costam rectæ, apice vix angulatæ, margine exteriore subobliquo.

Male. Resembles the *Noctuites*. Body moderately stout. Proboscis not visible. Palpi stout, pilose, porrect, extending very little beyond the head; third joint conical, acute. Antennæ moderately pectinated, rather longer than the thorax. Abdomen extending very little beyond the hind wings. Legs stout; hind tibiæ with four long spurs. Wings broad. Fore wings almost straight in

front, hardly angular at the tips, very slightly oblique along the exterior border; interior angle rounded; discal areolet intersected by a distinct vein; three inferior veins; third near the second, which is contiguous to the first.

1. CLEAPA LATIFASCIA.

Mas. *Pallide fusca; caput, palpi et thorax nigra; alæ anticæ marginibus nigricantibus, fascia latissima obscure fusca, lineis guttisque testaceis.*

Male. Pale brown. Head, palpi and thorax black. Fore wings blackish along the costa and along the exterior border, and with a very broad slightly undulating dark brown middle band, which is bordered along each side, with some pale brown and pale testaceous lines; a row of testaceous dots along the exterior border. Length of the body 6 lines; of the wings 15 lines.

h. East Indies. From Archdeacon Clerk's collection.

Genus 32. GLUPHISIA.

Corpus sat robustum. Ocelli conspicui. Proboscis brevis. Palpi brevissimi, porrecti, pilosi. Antennæ thorace paullo longiores. Abdomen alas posticas non superans. Pedes validi, sat pilosi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ longiusculæ, subangustæ; anticæ apud costam vix convexæ, apice rotundatæ; posticæ vena interna reliquis æquali. *Mas.* — Antennæ subpectinatæ. *Fœm.*—Antennæ subserratæ.

Peridea, *Steph. Ill. Brit. Ent. Haust.* ii. 32.
Bombyx, p., *Fabr.; Wien. Verz.; Esp.; Hübn.; Thunb.; Turt.; Haw.*
Phalæna, p., *Donov.*
Drymonia, p., *Hübn.*
Notodonta, p., *Ochs.; God.*
Gluphisia, *Boisd. Ind. Méth.* 56; *Duponch.; Westw.; Herr.-Schæff.; Steph. Cat. Brit. Lep.*

Body moderately stout, hairy. Proboscis very short. Palpi very short, decumbent, pilose. Abdomen not extending beyond the hind wings. Legs stout, somewhat pilose; hind tibiæ with two minute apical spurs. Wings rather long and narrow. Fore wings hardly convex along the costa, rounded at the tips; the four inferior veins near together at the base; first and second contiguous; third nearly twice further from the fourth than from the second. *Male.*—Antennæ slightly pectinated. *Female.*—Antennæ minutely serrated.

1. GLUPHISIA CRENATA.

Cinereo fuscoque mixta; alæ anticæ lunula pallida inter strigas ambas crenatas, linea undulata pallida; posticæ in angulo ani obscuriores; ciliæ in venis fuscæ.

——— ———, *Pap. d'Eur.* v. 40, pl. 183, f. 237.

Bombyx crenata, *Esp. Schmett.* iii. 245, pl. 47, f. 3, 4. *Borkh. Eur. Schmett.* iii. 439, 167. *Brahm, Ins. Kal.* 386, 537, 263.

Bombyx crenosa, *Hübn. Bomb.* 104, 5, pl. 4, f. 12.

Notodonta crenata, *Ochs. Schmett.* iii. 79, 16. *God. Lép. de France*, iv. 214, pl. 20, f. 4.

Drymonia crenosa, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Dimorphæ Noctuæformes*), 144, 1531.

Gluphisia crenata, *Boisd. Cat. et Ind. Méth.* 88, 686. *Duponch. Suppl. Lép. France, Pseudo-Bomb.* pl. 5, f. 1. *Westw. & Humph. Brit. Moths*, i. 73, pl. 14, f. 15. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 117, 7, 1.

a—*c*. Europe. From M. Becker's collection.

North America.

2. GLUPHISIA? SEPTENTRIONIS.

Mas. *Nigro-cinerea; antennæ albidæ, ramis nigricantibus; pectus, abdomen subtus et pedes sordide albida; abdomen supra pallide cinereum; alæ anticæ macula basali fasciisque duabus contiguis obliquis albido-testaceis, fasciaque subapicali nigricante; posticæ cinereo-albæ, fascia subtus media indistincta cinerascente.*

Male. Blackish gray. Antennæ whitish, with blackish branches. Pectus, abdomen beneath and legs dingy whitish. Abdomen above pale gray. Fore wings with a whitish testaceous spot near the base, and with two contiguous oblique bands of the same colour in the middle, and with a slender blackish subapical band. Hind wings grayish white, with an indistinct middle grayish band beneath. Length of the body 5 lines; of the wings 13 lines.

a. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

South America.

3. GLUPHISIA? ÆMILIA.

Fœm. *Fusca; alæ anticæ margine fasciisque duabus obliquis maculaque discali nigro-fuscis, maculisque duabus basim versus posticis, una rufa altera flava.*

Phalæna-Bombyx Æmilia, *Cram. Pap. Exot.* iv. 230, pl. 397, f. B
Oliv. Enc. Méth. v. 53, 105.
Euclea Æmilia, *Hübn. Verz. Schmett.* 149, 1564.

Female. Brown. Anteunæ simple, much longer than the thorax. Fore wings with dark brown borders, and with two dark brown bands, which are parallel to the exterior border, the inner one with white dots; a brown discal spot and two spots near the base of the interior border, one yellow, the other red.

Surinam.

Asia.

4. GLUPHISIA? INDICA.

Mas. *Cinerea; abdomen nigro vittatum; alæ anticæ luteo conspersæ, nigro bimaculatæ, fusco bifasciatæ, margine exteriore canescente nigro strigato.*

Male. Cinereous. Proboscis as long as the breadth of the head. Abdomen with a blackish stripe. Fore wings with numerous minute luteous dots, with two small black spots in a line on the disk, with two indistinct oblique angular brown stripes, and with a row of short black streaks on a somewhat hoary ground along the exterior border. Hind wings blackish brown. This species will perhaps form a new genus; the proboscis is longer than that of *G. crenata*, the fore wings are narrower towards the tips, and the exterior border is more oblique. Length of the body 4 lines; of the wings 12 lines.

East Indies. In Mr. Saunders' collection.

Genus 33. CNETHOCAMPA.

Corpus valde pilosum, sat robustum. Ocelli nulli. Proboscis non conspicua. Palpi pilosi, brevissimi. Antennæ thorace paullo longiores. Abdomen alas posticas vix superans. Pedes validi, pilosi; tibiæ posticæ calcaribus minutis apicalibus. Alæ sat latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subobliquo; posticæ vena interna reliquis debiliore. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ subpectinatæ.

Cnethocampa, *Steph. Ill. Brit. Ent. Haust.* ii. 46; *Duponch; Herr.-Schæff.*
Bombyx, p., *Linn.; Stew.; Turt.; Fabr.; Gmel.; Oliv.; God.; Boisd.; Hübn.; Haw.*
Gastropacha p., *Ochs.; Treits.*
Clisiocampa p., *Curt.*

Thaumetopœa, *Hübn. Verz. Schmett.* 185. *Steph. Cat. Brit. Lep.* 270.

Allied to the *Bombycidæ*.

Body very pilose, moderately stout. Ocelli none. Proboscis not visible. Palpi very short and hairy. Antennæ a little longer than the thorax. Abdomen not or hardly extending beyond the hind wings, tufted at the tip. Legs stout, hairy; hind tibiæ with minute apical spurs. Wings moderately broad. Fore wings straight along the costa, rounded at the tips; three inferior veins; second very near the first at the base; third remote. *Male.*—Antennæ moderately pectinated. Abdomen rather more slender than that of the female. *Female.*—Antennæ slightly pectinated.

A. Frons nuda, transverse carinata.
  A. Albida; corpus et alæ anticæ cinereo ochraceo mixta. 1. Herculeana, *Ramb.*
  B. Cinerea, fusco signata; alæ anticæ striga posteriore in venis 3 et 4 longius dentata; posticæ ciliis albis, in angulo ani fuscis. - - - - - - 2. Pityocampa, *Fabr.*
  C. Cinerea; alæ anticæ striga posteriore subrecta; posticæ ciliis inter venas fuscis, præsertim in areola 1a. 3. Pinivora, *Treits.*
  D. 4. maritima, *Kadens.*
B. Frons simplex, dense pilosa.
  A. Cinerea; alæ posticæ fascia in angulo ani dilatata fusca. processionea, *Linn.*
  B. Cinerea; alæ posticæ niveæ, solum ciliis areolæ 1æ fuscis. solitaris, *Friv.*

1. Cnethocampa Herculeana.

Albida, cinereo ochraceo varia; frons nuda, transverse carinata.

Bombyx Herculeana, *Ramb. Suppl.* 81, 82.
Cnethocampa Herculeana, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 115, 1, 1.

South Europe.

2. Cnethocampa Pityocampa.

Alæ anticæ cinereæ, strigis tribus obscurioribus; posticæ pallidæ, litura anali fusca.

Cnethocampa Pityocampa, *Steph. Ill. Brit. Ent. Haust.* ii. 48, 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 115, 1, 2.
Bombyx Pityocampa, *Wien. Verz.* 58. *Fam. Z.* 11. *Fabr. Mant. Ins.* ii. 114, 66; *Ent. Syst.* iii. 431, 74. *Illig. N. Ausg. dess.* i. 120, 11. *Oliv. Enc. Méth.* v. 51, 97. *Gmel. ed. Syst. Nat.* i. 5, 2416, 506. *Hübn. Bomb.* 140, 3, pl. 36, f. 161; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, M. a. f. 1. *Fuessl. A. Mag.* ii. 2, 232, pl. 3, f. 1, 9; *N. Mag.* i. 44. *Esp. Schmett.* iii. 159, pl. 29, f. 6, 7. *Borkh. Eur. Schmett.* iii. 138, 37. *Naturf.* xv. 73. *Vieweg, Tab. Verz.* i. 38, 19. *Schwarz, Raup.* ii. 532. *God. Lép. de France*, iv. 131, pl. 12, f. 7, 8. *De Villiers, Ann. Sci. Nat.* 1832; *Ann. Soc. Ent. Fr.* i. 201. *Saporta, Ann. Soc. Ent. Fr.* iii. 191.
Thaumetopœa Pityocampa, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Lachneides Pygiacæ*), 185, 1906. *Steph. Cat. Brit. Lep.* 271, 2.
Gastropacha Pityocampa, *Ochs. Schmett. Eur.* iii. 283, 18.

a. England.
b, *c*. Europe. From M. Becker's collection.
d. Europe. From Mr. Milne's collection.
e. Europe.

3. Cnethocampa pinivora.

Cinerea; alæ anticæ striga posteriore subrecta; posticæ ciliis inter venas fuscis.

Gastropacha pinivora, *Treits. Ratzeburg, Ent. Zeit. Stett.* i. 40.
Cnethocampa pinivora, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 116, 3, 3.

North Germany.

4. Cnethocampa maritima.

Gastropacha maritima, *Kadens.*
Cnethocampa maritima, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 116, 4, 4.

Portugal.

5. Cnethocampa processionea.

Alæ anticæ cinereo-fuscæ; strigis obscurioribus maris *tribus*, fœminæ *una.*

Cnethocampa processionea, *Steph. Ill. Brit. Ent. Haust.* ii. 47, 1. *Wood, Inst. Ent.* pl. 53, f. 34. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 117, 5, 5.

Bombyx processionea, *Linn. Syst. Nat.* ii. 819. *Gmel. ed. Syst. Nat.* i. 5, 2416, 37. *Fabr. Sp. Ins.* ii. 180, 56; *Mant. Ins.* ii. 114, 65; *Ent. Syst.* iii. 1, 430, 73. *Stew. El. Nat. Hist.* ii. 148. *Turt. Syst. Nat.* iii. 204. *Wien. Schmett.* 58. *Fam. Z.* 10. *Illig. N. Ausg. dess.* i. 120, 10. *Esp. Schmett.* iii. 150, pl. 29, f. 1—5. *Oliv. Enc. Méth.* v. 50, 96. *Hübn. Bomb.* 140, 2, pl. 36; f. 159 (mas), 160 (fœm.); *Larv. Lep.* iii. *Bomb.* ii. *Verœ*, M. a. f. 2. *Naturf.* xiv. 60, 4, pl. 2, f. 8—12. *Borkh. Eur. Schmett.* iii. 132, 36; *Rhein. Mag.* i. 369, 228. *Fuessl. Schw. Ins.* 34, 655; *N. Mag.* i. 50, 409; ii. 72, 292; iii. 153, 97; 159, 150. *Hufn. Tab. in Berl. Mag.* ii. 4, 402, 12; 434. *Schr. Faun. Boic.* ii. 1, 280, 1468. *Vieweg, Tab. Verz.* i. 37, 18. *Lang. Verz.* ii. 104, 804, 805. *Brahm, Ins. Kal.* 542, 404. *Schwarz, Raup.* 67, 221. *God. Lép. de France*, iv. 126, pl. 12, f. 5, 6.

Thaumetopœa processionea, *Hübn. Verz. Schmett.* 185, 1905. *Steph. Cat. Brit. Lep.* 270.

Gastropacha processionea, *Ochs. Schmett.* iii. 280, 17.

a—d. Europe. From M. Becker's collection.

6. CNETHOCAMPA SOLITARIS.

Cinerea; alæ posticæ niveæ.

Gastropacha solitaris, *Friv. Suppl.* 16, 17.

Cnethocampa solitaris, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 117, 6, 6.

a, *b*. Turkey. From De Frivaldsky's collection.

c. Europe. From M. Becker's collection.

Genus 34. RETHONA.

Mas. Corpus sat robustum. Caput antice fasciculatum. Palpi breves, porrecti, pilosi, caput non superantes; articulus 3us minutus, lanceolatus. Antennæ mediocriter pectinatæ, thorace paullo longiores. Abdomen alas posticas triente superans. Pedes sat graciles; femora et tibiæ pilis longis vestita; tibiæ posticæ calcaribus quatuor sat longis. Alæ sat angustæ; anticæ apud costam rectæ, apice vix acuminatæ, margine exteriore obliquo.

Male. Body moderately stout. Head tufted in front. Proboscis not visible. Palpi short, porrect, pilose, not extending so far as the head; third joint minute, lanceolate. Antennæ moderately pectinated, rather longer than the thorax. Abdomen extending for

half or one-third of its length beyond the hind wings. Legs rather slender; femora and tibiæ with long hairs; hind tibiæ with four moderately long spurs. Wings rather narrow. Fore wings straight along the costa, hardly acuminated at the tips, oblique along the exterior border; interior angle much rounded; discal areolet intersected by a distinct forked vein; second inferior vein further from the third than from the first; third about twice further from the fourth than from the second.

1. RETHONA STRIGOSA.

Mas. *Cana; palpi supra nigricantes; thorax fascia arcuata vittisque duabus nigris; abdomen alas posticas dimidio superans; pedes antici nigro varii; tarsi nigro fasciati; alæ anticæ nigro strigatæ.*

Male. Hoary. Palpi blackish above. Antennæ black, whitish towards the base. Thorax with a slender curved black band, which is connected on each side with a black stripe. Abdomen extending for half its length beyond the hind wings. Tarsi with black bands. Fore femora and fore tibiæ partly black. Fore wings with black streaks in the areolets. Length of the body 8 lines; of the wings 16 lines.

a. South Africa. Presented by Dr. A. Smith.

2. RETHONA ALBICANS.

Mas. *Alba; thorax nigro fasciatus; abdomen albidum, alas posticas triente superans; alæ anticæ fusco conspersæ, strigisque plurimis arcuatis transversis nigris.*

Male. White. Head partly clothed with black hairs. Antennæ with black branches. Thorax with a slender black band in front. Abdomen whitish, extending for one-third of its length beyond the hind wings. Fore wings with numerous brown flecks and with many short curved transverse black streaks. Length of the body 5 lines; of the wings 12 lines.

Var. β. Fore wings with fewer flecks and streaks, except towards the tips, where there are two curved bands, the inner one black, the outer one brown and more diffuse. Hind wings with numerous brown flecks.

a, b. Caffraria. From M. Becker's collection.

Genus 35. DAMATA.

Mas. Corpus robustum, pilosum. Proboscis brevis. Palpi breves, pilosi; articulus 2us 1o multo longior; 3us minimus. Antennæ latissime ciliatæ, apice nudæ, corporis dimidio longiores. Abdomen alas posticas triente superans. Pedes validi, pilosissimi; tarsi pilosi; tibiæ posticæ calcaribus apicalibus parvis. Alæ angustæ, longissimæ; anticæ apud costam vix convexæ, apice rotundatæ; margine exteriore valde obliquo.

Male. Body stout, hairy. Proboscis short, not so long as the breadth of the head. Palpi short and pilose; second joint much longer than the first; third very small. Antennæ rather more than half the length of the body, very deeply pectinated to five-sixths of the length; branches ciliated. Abdomen extending for one-third of its length beyond the hind wings. Legs stout, very pilose; tarsi pilose; hind tibiæ with small apical spurs. Wings narrow, very long. Fore wings hardly convex along the costa, rounded at the tips; exterior border very oblique, slightly concavé posteriorly; three inferior veins; second nearly thrice further from the third than from the first. Hind wings with the exterior border slightly undulating towards the interior border; first and second inferior veins nearly united at the base; third rather remote.

1. Damata longipennis.

Mas. *Fusco-rufa, albo varia; antennæ nigræ; thorax albo et rufo bimaculatus; abdomen fuscum, albo bistrigatum; alæ anticæ argenteo-albæ, cinereo tinctæ, nigro conspersæ et maculatæ; posticæ argenteo-albæ, semihyalinæ, fusco marginatæ et unimaculatæ, rufo ciliatæ, margine interiore albo.*

Male. Brownish red, with some white hairs interspersed. Antennæ black. Thorax with a large white triangular spot on each side; a small red spot on the dorsal side of each spot. Abdomen brown, with a white streak along each side. Fore wings silvery white, flecked with black, and for the most part slightly shaded with a pale cinereous tinge; two small snowy white patches on the discal areolet; four nearly triangular blackish spots, two on the costa, and two on the interior border; first costal spot near the base, larger than the others; a black mark between it and the second, which is attenuated into the disk; a row of oblong blackish red-bordered spots along the exterior border. Hind wings silvery white, semihyaline, white and more thickly clothed with hairs towards the inte-

rior border; tips and exterior margin bordered with brown and ciliated with red; this brown border is dilated by the interior angle, and is accompanied with a brown parallel streak; a slight brownish mark at the tip of the discal areolet. Length of the body 9 lines; of the wings 29 lines.

a. Himalaya Mountains. From Capt. Parry's collection.

Genus 36. HYLEORA.

Corpus robustum. Caput fasciculis duobus porrectis. Proboscis non conspicua. Palpi breves, porrecti, pilosi, caput non superantes; articulus 3us minimus. Antennæ thorace valde longiores. Thorax cristatus. Pedes validi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ longæ, sat latæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriore denticulato et valde obliquo; posticæ margine exteriore denticulato. *Mas.*—Antennæ late pectinatæ. Abdomen alas posticas dimidio superans. *Fœm.*—Antennæ simplices. Abdomen alas posticas paullo superans.

Hyleora, *Doubleday, Ann. Nat. Hist. 2nd Ser.* iv.

Body stout. Head with a porrect tuft on each side. Proboscis not visible. Palpi short, pilose, porrect, not extending beyond the head; third joint very small. Antennæ very much longer than the thorax. Thorax crested. Legs stout; femora and tibiæ densely pilose; hind tibiæ with four rather long spurs. Wings long, moderately broad. Fore wings hardly convex in front, rounded at the tips, notched and extremely oblique along the exterior border; interior angle very obtuse; discal areolet intersected by a secondary vein; three inferior veins; second about twice further from the third than from the first. Hind wings notched along the exterior border. *Male.*—Antennæ deeply pectinated. Abdomen extending for half its length beyond the hind wings. *Female.*—Antennæ simple. Abdomen extending for one-fourth of its length beyond the hind wings.

1. Hyleora Eucalypti.

Nigricans; caput et thorax albido varia, hic fœminæ fulvus; antennæ fulvæ; abdomen fulvum, apice nigricans; alæ anticæ striga albida; posticæ basi fulvæ.

Hyleora Eucalypti, *Doubleday, Ann. Nat. Hist. 2nd Ser.* iv. 217.

Blackish. Head and thorax with several whitish hairs. Antennæ tawny. Abdomen tawny, blackish at the tip. Fore wings

with a whitish stripe, which is very diffuse in the female. Hind wings tawny towards the base. *Female.*—Thorax tawny.

a—d. Van Dieman's Land. Presented by Morton Allport, Esq.
e. Van Dieman's Land. Presented by the Rev. Augustus Beaufort.
f. Van Dieman's Land. From Mr. Stevens' collection.
g. New Holland. From Mr. Lambert's collection.

Genus 37. NAPREPA.

Mas. Corpus robustum. Proboscis capitis latitudine multo longius. Palpi validi, porrecti, pilosi, caput superantes; articulus 3us linearis, 2o multo brevior. Antennæ subpectinatæ, thorace multo longiores. Abdomen alas posticas triente superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, sat latæ; anticæ apud costam vix convexæ, margine exteriore obliquo et fortiter denticulato, margine interiore subconcavo, basim versus fasciculato; posticæ margine exteriore denticulato.

Male.—Body stout. Proboscis much longer than the breadth of the head. Palpi stout, pilose, porrect, extending somewhat beyond the head; third joint linear, much shorter than the second. Antennæ very slightly pectinated, much longer than the thorax. Abdomen extending for one-third of the length beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spines. Wings rather long, moderately broad. Fore wings hardly convex along the costa, oblique and deeply denticulated along the exterior border; interior border slightly concave, tufted towards the base; discal areolet intersected by a distinct vein; three inferior veins; second full four times further from the third than from the first.

1. Naprepa camelinerdes.

Mas. *Ferrugineo-fusca; antennæ fulvæ; thorax albo varius; abdomen nigricans, fasciis luteis; alæ anticæ strigis lanceolatis fasciisque duabus angulosis duplicatis nigricantibus, apud marginem interiorem albido notatæ; posticæ pallidiores, obscure fusco albidoque apud angulum interiorem signatæ.*

Aneurocampa camelinerdes, *MSS.*

Male. Ferruginous-brown. Antennæ tawny. Thorax with some white hairs. Abdomen blackish, with luteous bands. Fore wings with lanceolate blackish streaks, and with two slender double zigzag blackish bands; the first very oblique, the second marginal; some whitish marks by the interior border. Hind wings paler

brown; a dark brown and whitish mark by the interior angle. Length of the body 15 lines; of the wings 38 lines.

Brazil. In Mr. Saunders' collection.

Genus 38. ANEUROCAMPA.

Statura magna. Corpus robustum. Proboscis capitis latitudine multo longior. Palpi validi, porrecti, pilosi, caput paullo superantes; articulus 3us parvus, obtusus. Antennæ thorace multo longiores. Abdomen alas posticas triente superans. Pedes robusti, dense pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, sat latæ; anticæ apud costam subconvexæ, apice rotundatæ, margine exteriore subobliquo parum denticulato, interiore integro; posticæ apud costam convexæ, apice subangulatæ, margine exteriore vix denticulato. *Mas.* — Antennæ sat late pectinatæ. Abdomen apice fasciculatum. *Fœm.*—Antennæ mediocriter pectinatæ.

Aneurocampa, *Boisd.*; *Herr.-Schæff. Lep. Exot. Sp. Ser.* 1.

Size large. Body stout. Proboscis much longer than the breadth of the head. Palpi robust, very pilose, extending little beyond the head; third joint small, obtuse. Antennæ much longer than the thorax. Abdomen extending for about one-third of its length beyond the hind wings. Legs stout, very pilose; hind tibiæ with four long spurs. Wings rather long, moderately broad. Fore wings very slightly convex in front, rounded at the tips, slightly oblique and slightly denticulated along the exterior border; interior angle rounded; interior border slightly fasciculated towards the base; discal areolet intersected by a secondary vein; three inferior veins; first and second nearly contiguous; third rather remote. Hind wings convex in front, hardly angular at the tips; exterior border hardly denticulated. *Male.*—Antennæ rather deeply pectinated. Abdomen tufted at the tip. *Female.*—Antennæ moderately pectinated.

A. Abdomen nigrum. - - - - - mingens, *Boisd.*
B. Abdomen fuscum. - - - - - flavigutta, *Walk.*
C. Abdomen ferrugineum. - - - - canovaria, *Walk.*
D. Abdomen cervinum. - - - - melanostigma, *Walk.*

1. ANEUROCAMPA MINGENS.

Viridi-fusca, albido varia, subtus ex parte lutea; antennæ pallide luteæ; abdominis dorsum nigro luteo fasciatum; alæ anticæ plaga costali albida, posticæ fuscæ luteo marginatæ.

Aneurocampa mingens, *Boisd; Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, pl. 18, f. 83, 84.

Olive-green. Abdomen black, with luteous borders and bands. Fore wings with a very broad middle anterior pale band, which includes a transverse white discal spot, with four slender irregular pale partly blackish-bordered bands, with a transverse row of white partly black-bordered dots beyond the third band, and with a black submarginal streak. Hind wings brown, luteous towards the base and about the inner border and along the outer border. *Male.*—Abdomen grayish at the tip, and with a dorsal row of grayish spots. Hind wings darker than those of the female, and with an oblique black band. *Female.*—Abdomen with a grayish spot at the tip.

a, *b*. Brazil. From M. Becker's collection.

2. Aneurocampa flavigutta.

Mas. *Cinerea; antennæ testaceæ; thorax postice ferrugineus; abdomen fuscum, basi ferrugineum; alæ anticæ cinereo-fuscæ, macula basali guttisque marginalibus flavis, fasciis duabus albis unaque nigricante guttularibus; posticæ ferrugineæ, fascia submarginali cinereo-fusca.*

Male. Cinereous. Antennæ testaceous. Hind part of the thorax ferruginous. Abdomen brown-ferruginous towards the base, much paler beneath. Fore wings cinereous-brown, with a small basal yellow spot, with a marginal row of yellow dots, with a submarginal row of blackish dots, which are partly bordered with metallic green, and with two oblique bands of minute white dots on the veins, one near the base, the other in the middle; a small blackish spot on the discal areolet; under side ferruginous. Hind wings ferruginous, cinereous-brown above along the costa, and with a submarginal band of the same colour; fringe brown. Length of the body 8 lines; of the wings 15 lines.

Rio Janeiro. In Mr. Fry's collection.

3. Aneurocampa canovaria.

Mas. *Ferruginea; caput et thorax cano varia; alæ anticæ canæ, basi ferrugineæ fusco maculatæ, fasciis duabus pallide fuscis, unaque ferruginea fusco marginata obliquis angulosis, margine exteriore ferrugineo maculis fuscis; posticæ cano marginatæ.*

Male. Ferruginous. Head and thorax with many hoary hairs. Fore wings hoary, ferruginous, with brown spots at the base, and with a ferruginous brown-bordered angular oblique band at one-third of the length; beyond this there are two oblique zigzag pale brown slender bands, one beyond the middle, the other near the exterior border, which is ferruginous with brown spots. Hind wings hoary along the costa and along the exterior border, which is like that of the fore wings. Length of the body 7 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

4. ANEUROCAMPA MELANOSTIGMA.

Fœm. *Cervina; antennæ fulvæ; alæ anticæ ex parte testaceæ, fasciis tribus obscurioribus undulosis vix obliquis maculaque parva discali nigra; posticæ fascia pallida undulosa submarginali.*

Female.—Fawn-colour. Antennæ tawny. Fore wings partly testaceous, with three slender undulating hardly oblique darker bands, which have paler margins, and with a small transverse discal black spot between the first and second bands. Hind wings with a single pale undulating submarginal band. Length of the body 10 lines; of the wings 25 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 39. PHALERA.

Corpus sat validum. Proboscis capitis latitudine paullo brevior. Palpi breves, porrecti, piloci, caput non superantes; articulus 3us minimus. Antennæ thorace multo longiores. Abdomen alas posticas superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ sat latæ et longæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo et subdenticulato; posticæ apud marginem integræ. *Mas.*—Antennæ subpectinatæ. *Fœm.*—Antennæ simplices.

Bombyx, p., *Linn.; Fabr.; Gmel.; Oliv.; Haw.; God.*
Pygæra, p., *Ochs. Schmett. von Eur.*
Pygæra, *Steph.; Boisd.; Duponch.*
Sericaria, p., *Latr. Fam. Nat.* 474.
Laria, p., *Schr.*
Melalophæ, p., *Hübn.*
Acrosema, *Meig. Eur. Schmett.* iii. 24.
Phalera, *Hübn. Verz. Schmett.* 146; *Herr.-Schæff.; Steph. Cat. Brit. Lep.*
Hammatophora, *Westw. & Humph.*

Body moderately stout. Proboscis nearly as long as the breadth of the head. Palpi short, porrect, pilose, not extending so far as the head; third joint very minute. Antennæ much longer than the thorax. Abdomen extending for one-fourth or one-third of its length beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings moderately long and broad. Fore wings straight in front, rounded at the tips, oblique and very slightly denticulated along the exterior border; interior angle much rounded; interior border entire; discal areolet intersected by a secondary vein; three inferior veins; first and second nearly contiguous; third remote. Hind wings entire along the exterior border. *Male.*—Antennæ slightly pectinated. *Female.*—Antennæ simple.

Europe.

A. Macula pallida media obsoleta, verticalis, apicalis, areolam 3am vix intrans. - - - - - - Bucephalus, *Linn.*
B. Macula pallida media magna longitudinalis ovalis, apicalis, areolam 3am fere totam occupans. - Bucephaloides, *Hübn.*
C. Alæ anticæ vitta costali nivea, strigis antelimbalibus obliquis nigris. - - - - - - albicosta, *Herr.-Schæff.*

1. Phalera Bucephala.

Alæ argenteo-cinereæ, strigis duabus yeminatis ferrugineis, maculaque magna terminali flava.

Pygæra bucephala, *Ochs. Schmett. von Eur.* iii. 235, 6; iv. 57, 6. *Steph. Ill. Brit. Ent. Haust.* iii. 11, 1. *Duponch. Suppl. Lép. France*, iii. 131, pl. 11, f. 4; iv. pl. 15, f. 1. *Zett. Ins. Lapp.* 924, 2.

Bombyx bucephala, *Linn. Syst. Nat.* ii. 816; *Faun. Suec.* 1115. *Gmel. ed. Syst. Nat.* i. 5, 2417, 31. *Berk. Syn.* i. 134. *Don. Nat. Hist. Brit. Ins.* i. pl. 3. *Stew. El. Nat. Hist.* 149. *Turt. Syst. Nat.* iii. 208. *Fabr. Sp. Ins.* ii. 184, 70; *Mant. Ins.* ii. 117, 90; *Ent. Syst.* iii. 1, 439, 99. *Wien. Verz.* 59, M. *Borkh. Schmett.* iii. 346, 130. *Esp. Schmett.* vii. pl. 22, f. 1—4. *Hübn. Bomb.* pl. 45, f. 194, 195. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, T, a. b, f. 1. *Illig. N. Ausg. dess.* i. 122, 1. *Schæff. Icon.* 44, pl. 31, f. 10, 1. *Nomencl. Panz. Wilkes, Nat. Hist. Ins.* pl. 43. *Esp.* iii. 111, pl. 22, f. 1—4; 393, pl. 79, f. 1. *Scop. Ent. Carn.* 208, 515. *Borkh. Eur. Schmett.* iii. 346, 130. *Rhein. Mag.* i. 370, 229. *Müll. Faun. Fridr.* 40, 361. *Zool. Dan.* 118, 1357. *Fuessl. Schw. Ins.* 34, 649;

A. Mag. i. 2, 283; *N. Mag.* ii. 60, 31; iii. 2, 164, 200. *Oliv. Enc. Méth.* v. 61, 132. *Hufn. Tab. in Berl. Mag.* iii. 2, 204, 1. *Vieweg, Tab. Verz.* i. 50, 40. *Rossi, Faun. Etr.* ii. 171, 1083; *ed. Illig.* 274, 1083. *Lang. Verz.* ii. 106, 814, 815. *God. Lép. de France*, iv. 236, pl. 22, f. 1. *Brahm, Ins. Kal.* 473, 33. *Schw. Raup.* 373, 521, 650.

Acrosema Bucephala, *Meig. Handb.* 128, 62; *Syst. Beschr. Eur. Schmett.* iii. 24, 1, pl. 82, f. 1.

——— ———, *Mouff. Ins. Theat.* 92, f. 11. *List. Göed.* (Angl.) 88, f. 95. (Lat.) 213, f. 95. *Albin, Nat. Hist. Engl. Ins.* pl. 23, f. 23, a—d. *Pap. d'Eur.* v. 49, pl. 185, f. 240. *Geoff. Hist. Ins.* ii. 123, 28. *Deg. Ins.* i. 2, 12, 2, pl. 13, f. 7—20. *Röes. Ins. Bel.* i. 89, pl. 14, f. 1—7. *Frisch, Ins.* xi. 26, pl. 4, f. 1—4. *Sepp. Ins.* ii. pl. 14, f. 1—6.

Bombyx bucephalus, *Haw. Lep. Brit.* 92.

Phalera Bucephala, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Inlunatæ*) 147, 1524. *Steph. Cat. Brit. Lep.* 37. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 128, 37, 1.

a, b. England. Presented by H. Doubleday, Esq.
c. England. From Mr. Foxcroft's collection.
d—o. England. From Mr. Stephens' collection.
p, q. Europe. From M. Becker's collection.
r. Europe. From Mr. Milne's collection.
s, t. Europe.

2. Phalera Bucephaloides.

Macula pallida media magna longitudinalis ovalis apicalis, areolam 3am fere totam occupans.

Bombyx bucephaloides, *Hübn. Bomb.* pl. 63, f. 267, 268.

Pygæra bucephaloides, *Ochs. Schmett. von Eur.* iv. 57, 203, 7. *Boisd. Duponch. Suppl. Lép. France*, iii. pl. 11, f. 1; iv. pl. 15, f. 2.

Acrosema bucephaloides, *Meig. Handb.* 128, 63; *Syst. Beschr. Eur. Schmett.* iii. 252.

Phalera bucephaloides, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Inlunatæ*) 147, 1553. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 128, 38, 2.

South France. Hungary.

a—d. Europe. From M. Becker's collection.

3. PHALERA ALBICOSTA.

Cinerea; caput, prothorax et abdomen fusco-ochracea; alæ anticæ vitta costali nivea, strigis antelimbalibus obliquis nigris.

Phalera albicosta, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 128, 39, 3.

Europe.

Asia.

4. PHALERA FLAVESCENS.

Albido-flavida; abdomen ferrugineum; alæ anticæ supra macula basali cinerea cum apice nigro, fascia submarginali cinerea cum lunulis nigris et fulvis.

Pygæra flavescens, *Bremer und Grey, Beitr. zur Schmett.-Fauna des Nordlichen China*, 16, 83.

North China.

5. PHALERA ASSIMILIS.

Cinerea; thorax macula magna dorsali ferruginea obscurius annulata; abdomen ferrugineum; alæ anticæ nigro undulatæ, apice plaga semilunari flava, subtus posticæque omnino subcinereæ.

Pygæra assimilis, *Bremer und Grey, Beitr. zur Schmett.-Fauna des Nordlichen China*, 16, 82.

North China.

Genus 40. DANIMA.

Corpus robustum. Proboscis capitis latitudine æqualis. Palpi breves, porrecti, pilosi, caput non superantes; articulus 3us minimus. Thorax pilis clavatis. Pedes validi; femora et tibiæ dense pilosa; tibiæ posticæ calcaribus duobus apicalibus sat longis. Alæ longiusculæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo et subconvexo. *Mas.*—Antennæ mediocriter pectinatæ, thorace æquales, dimidio fere apicali nudo. Abdomen alas posticas dimidio superans. Alæ sat angustæ. *Fœm.*—Antennæ simplices, thorace paullo longiores. Abdomen alas posticas triente superans. Alæ sat latæ.

Bombyx, p., *Lewin.*
Harpya, p., *Boisd.*

Body stout. Proboscis as long as the breadth of the head. Palpi short, porrect, pilose, not extending beyond the head; third joint very minute. Thorax with clavate hairs. Legs stout; femora and tibiæ thickly pilose; hind tibiæ with two moderately long apical spurs. Wings rather long. Fore wings straight along the costa, rounded at the tips, oblique and slightly convex on the exterior border; interior angle rounded; discal areolet intersected by a secondary vein and obliquely divided by a vein which joins the third inferior vein; second inferior vein about four times further from the third than from the first. *Male.*—Antennæ moderately pectinated to rather beyond half the length, as long as the thorax. Abdomen extending for half its length beyond the hind wings. Wings rather narrow. *Female.*—Antennæ simple, a little longer than the thorax. Abdomen extending for one-third of its length beyond the hind wings. Wings moderately broad.

1. Danima Banksiæ.

Thorax nigro luteo alboque variegatus; abdomen supra luteo-ferrugineum lateribus nigro maculatis; alæ anticæ fuscæ, nigro variegatæ, albido luteoque conspersæ; posticæ fuscescentes; quatuor subtus immaculatæ. Larva *flavo virescens subcaudata fasciis octo obliquis albidis maculisque septem lateralibus nigris albo tripunctatis.*

Bombyx Banksiæ, *Lewin, Prodr. Ent.* 10, pl. 9.
Harpya Banksiæ, *Boisd. Voy. de l'Astrolabe*, Pt. 1, *Lep.* 238.

Black. Antennæ tawny. Thorax with several luteous and white-tipped hairs; a large white spot on each side. Abdomen luteous above, except at the base and at the tip; a row of black spots along each side. Wings gray. Fore wings with whitish and luteous flecks and with some black streaks. *Male.*—Hind wings whitish, except at the base and along the interior border. *Female.*—Abdomen whitish at the tip.

a, b. Sydney. From the Paris Museum.
c. Sydney. Presented by the late Earl of Derby.
d. New South Wales. From Mr. Wood's collection.
e. Van Dieman's Land. Presented by the Rev. Augustus Beaufort.
f—h. New Holland. From Mr. Hunter's collection.
i. New Holland.

Genus 41. ICHTHYURA.

Corpus sat robustum. Proboscis brevissima. Palpi breves, porrecti, caput non superantes; articulus 3us parvus, conicus. Antennæ corporis dimidio breviores. Abdomen alas posticas triente superans, apice fasciculatum. Pedes validi; tibiæ anticæ densissime pilosæ, posticæ calcaribus duobus parvis apicalibus. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine externo subobliquo. *Mas.*—Antennæ sat late pectinatæ. *Fœm.*—Antennæ subpectinatæ.

Ichthyura, *Hübn. Verz. Schmett.* 162.
Clostera, *Hoffmansegg; Steph.; Boisd.; Duponch.*
Laria, p., *Schr.*
Melalophæ, p., *Hübn.*
Pygæra, p., *Ochs.; Meig.; Herr.-Schæff.*
Bombyx, p., *Linn.; Fabr.; Gmel.; Oliv.*

Body moderately stout. Proboscis very short. Palpi short, porrect, not extending as far as the head; third joint small, conical. Antennæ less than half the length of the body. Abdomen extending for about one-third of its length beyond the hind wings, tufted at the tip. Legs stout; fore tibiæ very densely pilose; hind tibiæ with small apical spurs. Wings moderately broad. Fore wings straight along the costa, rounded at the tips, slightly oblique along the exterior border; interior angle much rounded; discal areolet intersected by a secondary vein; three inferior veins; second nearly contiguous to the first, rather remote from the third. *Male.*—Antennæ rather deeply pectinated. *Female.*—Antennæ minutely pectinated.

Europe.

A. Alæ posticæ strigis duabus transversis pallidis. Timon, *Hübn.*
B. Alæ posticæ innotatæ.
A. Striga posterior versus marginem anteriorem alba.
a. Macula apicalis a limbo usque ad strigam posteriorem et venam 3am. - - - - - curtula, *Linn.*
b. Macula apicalis a limbo usque ad lunulam mediam.
a. Cinerea, apice usque ad venam 3am obscuriore. anachoreta, *Fabr.*
b. Violaceo-cinerea, dimidio limbali obscuriore, versus marginem anteriorem cinnamomeo. - reclusa, *Fabr.*
B. Striga posterior versus marginem anteriorem non albidior. anastomosis, *Linn.*

1. Ichthyura Timon.

Alæ subcinereæ; anticæ puniceo variæ, macula apicis lunari nivea strigisque tribus albidis.

Bombyx Timon, *Hübn. Bomb.* pl. 22, f. 86.

Pygæra Timon, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Melalophæ Certæ*) 162, 1681. *Ochs. Schm. von Eur.* iii. 225, 1; iv. 56, 202, 1. *Meig. Syst. Beschr. Eur. Schmett.* iii. 22. *Fisch. Entom. Ruth.* 58, 1. *Lep.* pl. 2. *Duponch. Suppl. Lép. France*, iii. pl. 11, f. 2. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 129, 40. 1.

Russia.

2. Ichthyura curtula.

Alæ glaucæ, anticæ strigis quatuor pallidis maculaque apicis testacea.

Clostera curtula, *Steph. Ill. Brit. Ent. Haust.* ii. 14, 4. *Duponch. Suppl. Lép. France*, iv. pl. 14, f. 2.

Bombyx curtula, *Linn. Syst. Nat.* ii. 823, 52; *Faun. Suec.* ed. 2, 299, 1124. *Gmel. ed. Syst. Nat.* i. 5, 2426, 52. *Stew. El. Nat. Hist.* ii. 152. *Turt. Syst. Nat.* iii. 212. *Illig. N. Ausg. dess.* i. 101, 2. *Schwarz, Beytr.* ii. 109, pl. 17, f. 1—4. *Borkh. Eur. Schmett.* iii. 338, 127; *Rhein. Mag.* i. 356, 206. *Fabr. Sp. Ins.* ii. 188, 84; *Mant. Ins.* ii. 120, 112; *Ent. Syst.* iii. 1, 447, 123. *Wien. Verz.* 55. *Fam.* H. 2. *Oliv. Enc. Méth.* v. 69, 156. *Hübn. Bomb.* pl. 22, f. 89. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, E, b, f. 1. *Müll. Faun. Fridr.* 41, 367; *Zool. Dan.* 118, 1366. *Fuessl. A. Mag.* ii. 1, 1; *N. Mag.* iii. 2, 157, 136. *Brahm, Ins. Kal.* 509, 370. *Schwarz, Raup.* 247, 380, 523, 651. *God. Pap. de France*, iv. 233, pl. 21, f. 5.

Laria curtula, *Schr. Faun. Boic.* ii. 2, 115, 14.

——— ———, *Deg. Ins.* ii. 1, 231, 9, pl. 4, f. 22—25. *Albin, Nat. Hist. Engl. Ins.* pl. 88. *Pap. d'Eur.* iv. 195, pl. 165, f. 215. *Suppl.* pl. 5, f. 215. *Frisch. Ins.* v. pl. 6. *Sepp. Ins.* iv. pl. 1, f. 13—18.

Bombyx anachoreta, *Esp. Schmett.* iii. 260, pl. 51, f. 5; 44, pl. 86, f. 6—8. *Fuessl. N. Mag.* iii. 2, 158, 147. *Vieweg, Tab. Verz.* i. 51, 42. *Lang. Verz.* ii. 98, 751. *Rossi, Faun. Etr.* ii. 18, 374.

Bombyx curtulus, *Haw. Lep. Brit.* 130.

Pygæra curtula, *Ochs. Schmett.* iii. 232, 5; iv. 56, 5. *Meig. Handb.* 128, 61; *Syst. Beschr. Eur. Schmett.* iii. 22, 4, pl. 82, f. 9. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 129, 41, 2.

Ichthyura curtula, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Melalophæ Certæ*) 162, 1684.

a—g. England. From Mr. Stephens' collection.
h—i. England.
j—m. Europe. From M. Becker's collection.

3. Ichthyura anachoreta.

Alæ cinereæ, anticæ strigis albidis, macula apicis fusco-ferruginea linea undata alba; macula nigerrima areolæ 2æ versus angulum ani.

Clostera anachoreta, *Steph. Ill. Brit. Ent. Haust.* ii. 13. *Curt. Brit. Ent.* xv. pl. 715. *Duponch. Suppl. Lép. France*, iv. pl. 14, f. 3.

Bombyx anachoreta, *Fabr. Mant. Ins.* ii. 120; *Ent. Syst.* iii. 447, 125. *Gmel. ed. Syst. Nat.* i. 5, 2426, 545. *Wien. Verz.* 56. *Fam.* H. 3. *Illig. N. Ausg. dess.* i. 101, 3. *Schæff. Icon.* 181, pl. 211, f. 5, 6. *Nomencl. Panz. Borkh. Eur. Schmett.* iii. 341, 128; *Rhein. Mag.* i. 336, 207. *Schr. Faun. Boic.* ii. 1, 269, 1451. *Brahm, Ins. Kal.* 110, 49; 510, 271. *Schwarz, Raup.* 246, 388, 523, 651. *Oliv. Enc. Méth.* v, 70, 158. *God. Lép. de France*, iv. 230, pl. 21, f. 6.

Bombyx curtula, *Esp. Schmett.* iii. 256, pl. 51, f. 1—4. *Fuessl. Schw. Ins.* 35, 669; *A. Mag.* ii. 1, 1; *N. Mag.* iii. 2, 163, 194. *Hufnagel, in Berl. Mag.* ii. 4, 408, 20. *Vieweg, Tab. Verz.* i. 51, 41. *Lang. Verz.* ii. 98, 747, 748. *Hübn. Bomb.* 124, 4, pl. 22, f. 88; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, E. a. f. 1.

Laria anachoreta, *Schr. Faun. Boic.* ii. 2, 151, 15.

——— ———, *Frisch, Ins.* v. 18, pl. 6, f. 1—6. *Röes. Ins. Bel.* 256, pl. 43, f. 1—5. *Sepp, Ins.* ii. B. pl. 1, f. 12—18. *Pap. d'Eur.* iv. 192, pl. 165, f. 214.

Bombyx anachoretus, *Haw. Lep. Brit.* 131.

Ichthyura anachoreta, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Melalophæ Certæ*), 162, 1685.

Pygæra anachoreta, *Ochs. Schmett. von Eur.* iii. 230, 4; iv. 56, 4. *Meig. Handb.* 128, 60; *Syst. Beschr. Eur. Schmett.* iii. 21, 3, pl. 82, f. 8. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 42, 3.

a, b. England.
c—e. Europe. From M. Becker's collection.
f, g. Europe. From Mr. Milne's collection.
h, i. Enrope.

4. ICHTHYURA RECLUSA.

Alæ anticæ glauco-cinerascentes, strigis quatuor albidis subanastomantibus, macula apicis ferruginea punctoque marginali albo; posticæ fuscæ.

Clostera reclusa, *Steph. Ill. Brit. Ent. Haust.* ii. 13, 2, pl. 16, f. 1.
Bombyx reclusa, *Fabr. Mant. Ins.* ii. 120, 113; *Ent. Syst.* iii. 1, 447, 124, *Wien. Verz.* 56. *Fam.* H. 4. *Gmel. ed. Syst. Nat.* i. 5, 2426, 544. *Illig. N. Ausg. dess.* i. 102, 4. *Schwr. Faun. Boic.* ii. 1, 269, 1452. *Esp. Schmett.* iii. 260, pl. 51, f. 6—8. *Borkh. Eur. Schmett.* iii. 344, 129; *Rhein. Mag.* i. 356; 208. *Vieweg, Tab. Verz.* i. 52, 43. *Lang. Verz.* ii. 98, 749, 750. *Fuessl. A. Mag.* ii. 1, 2; *N. Mag.* iii. 2, 165, 213; *Brahm, Ins. Kal.* 512, 372. *Schwarz, Raup.* 249, 388, 532, 666. *Oliv. Enc. Méth.* v. 69, 157. *Hübn. Bomb.* 124, 5, pl. 22, f. 90; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, E. b. f. 2. *God. Lép. de France*, iv. 230, pl. 21, f. 4.
Phalæna anastomosis, *Scop. Ent. Carn.* 201, 502.
Bombyx anastomosis, *Donov. Nat. Hist. Brit. Ins.* iv. pl. 124, 129, f. 4.
Phalæna pigra, *Hufnagel, Tab. in Berl. Mag.* ii. 4, 426, 46. *Naturf.* viii. 109, 46.
Laria reclusa, *Schwr. Faun. Boic.* ii. 2. 152, 16.
Bombyx reclusus, *Haw. Lep. Brit.* 131.
——— ———, *Röes. Ins.* iv. 81, pl. 11, f. 1—6. *Deg. Ins.* ii. 1, 234, 11, pl. 5, f. 1. *Pap. d'Eur.* iv. 197, pl. 165, f. 216.
Pygæra reclusa, *Ochs. Schmett.* iii. 288, 3; iv. 56, 3. *Meig. Handb.* 127, 59; *Syst. Beschr. Eur. Schmett.* iii. 21, 2, pl. 82, f. 7. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 129, 43, 4.
Ichthyura reclusa, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Melalophæ Certæ*), 162, 1686.

a—j. England. From Mr. Stephens' collection.
k. England. From Mr. Stevens' collection.
l—n. England.
o—r. Europe. From M. Becker's collection.
s—v. Europe.

5. ICHTHYURA ANASTOMOSIS.

Alæ cinereæ ferrugineo-fuscoque variæ, strigis tribus albidis subanastomosantibus; thorax ferrugineus.

Clostera anastomosis, *Steph. Ill. Brit. Ent. Haust.* ii. 13. *Duponch. Suppl. Lép. France*, iv. pl. 14, f. 1.

Bombyx anastomosis, *Linn. Syst. Nat.* i. 2, 824, 53; *Faun. Suec. ed.* 2, 299, 1125. *Gmel. ed. Syst. Nat.* i. 5, 2427, 53. *Fabr. Sp. Ins.* ii. 189, 85; *Mant. Ins.* ii. 120, 115; *Ent. Syst.* iii. 1, 448, 126. *Wien. Verz.* 55. *Fam.* H. 1. *Illig. N. Ausg. dess.* i. 100, 1; *Mag.* ii. 51, 1. *Esp. Schmett.* iii. 262, pl. 52, f. 1—4. *Borkh. Eur. Schmett.* iii. 335, 126; *Rhein. Mag.* i. 355, 205. *Müll. Faun. Fridr.* 41, 368; *Zool. Dan.* 108, 1365. *Fuessl. Schw. Ins.* 35, 670; *A. Mag.* ii. 1, 3. *Hufn. Tab. in Berl. Mag.* ii. 4, 420, 37. *Schr. Faun. Boic.* ii. 1, 268, 1450. *Viewg, Tab. Verz.* i. 52, 44. *Lang. Verz.* ii. 99, 754, 755. *Brahm, Ins. Kal.* 468, 330. *Schwarz, Raup.* 226, 380, 649, 751. *Scriba, Journ.* iii. 241, 1. *Oliv. Enc. Méth.* v. 70, 159. *Hübn. Bomb.* 123, 2, pl. 22, f. 87; *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, E. a. f. 2. *God. Lép. de France*, iii. 225, pl. 21, f. 3.

Laria anastomosis, *Schw. Faun. Boic.* ii. 2, 151, 13.

Pygæra anastomosis, *Ochs. Schmett. von Eur.* iv. 226, 2. *Meig. Handb.* 127, 58; *Syst. Beschr. Eur. Schmett.* iii. 20, 1, pl. 82, f. 6. *Zett. Ins. Lapp.* 924, 1. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 129, 44, 5.

Ichthyura anastomosis, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Melalophæ Certæ*), 162, 1683.

———, *Göed. Ins.* i. pl. 33. *List. Göed.* 23, pl. 23. *Röes. Ins. Bel.* i. 2, 157, pl. 26, f. 1—5. *Deg. Ins.* ii. 1, 233. *Pap. d'Eur.* iv. 189, pl. 164, f. 213.

a, *b*. Europe. From M. Becker's collection.

North America.

6. Ichthyura apicalis.

Mas. *Cinerea; caput nigro-fuscum; frons et palpi subtus albida; antennæ canæ ramis cinereis; thorax vitta dorsali nigro-fusca; alæ anticæ fusco-cinereæ, linea undulosa albida maculaque costali rufo-fusca; posticæ cinereæ; subtus albidæ fascia gracili discali undulosa fuscescente.*

"Larva brown, thick, with 16 feet, and with a band on part of the back, feeds on the poplar-leaf, which it draws together with silk. Cocoon slight and white. The moth appears in June."—*Barnston MSS.*

a, *b*. St. Martin's Falls, Albany River, Hudson's Bay. Presented by Dr. Barnston.

7. ICHTHYURA INCLUSA.

Cinereo-ferruginea; caput thoracisque discus saturate fusca; alæ anticæ guttis exterioribus nigris lineisque tribus transversis albidis, 2a postice furcata; posticæ discali subundulosa albida.

Phalæna anastomosis, *Smith & Abbot, Nat. Hist. Lep. Ins. Georg.* ii. 143, pl. 72.
Ichthyura inclusa, *Hübn. Zuytr.*

Ferruginous, here and there more or less cinereous. Head above and disk of the thorax deep dark brown. Fore wings with a reddish tinge about the tips, with a row black dots near the exterior border, and with three transverse whitish lines, the middle one forked in the disk hindward.

a—d. Georgia. From Mr. Abbot's collection.

Genus 42. COLOCASIA.

Corpus robustum. Proboscis capitis latitudine non brevior. Palpi validi, pilosi, porrecti, caput non superantes; articulus 3us minutus obtusus. Antennæ thorace paullo longiores. Thorax cristatus. Abdomen alas posticas non superans. Pedes pilosi, sat validi; tibiæ posticæ calcaribus duobus apicalibus mediocriter longis. Alæ mediocriter longæ latæque; anticæ apud costam subrectæ, apice rotundatæ, margine interiore obliquo integro, interiore non fasciculato. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ subserratæ.

Colocasia, *Ochs. Schmett. von Eur.; Hübn.; God.*
Bombyx, p., *Linn.; Fabr.; Gmel.; Oliv.; Hübn.; Haw.*
Phalæna, p., *Wilkes.*
Demas, *Steph.*
Oregyia, p., *Meig.*
Orgya, p., *Boisd.*

Body stout. Proboscis as long as the breadth of the head. Palpi stout, porrect, pilose, extending as far as the head; third joint minute, obtuse. Antennæ a little longer than the thorax. Thorax crested. Abdomen extending as far as the hind wings. Legs pilose, moderately stout; hind tibiæ with two moderately long apical spurs. Wings moderately long and broad. Fore wings almost straight in front, rounded at the tips, oblique and entire along the exterior border; interior angle rounded; interior border

straight, not indented or tufted; first, second and third inferior veins near together at the base; third about twice further from the fourth than from the first. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ minutely serrated.

1. Colocasia Coryli.

Alæ anticæ obscure fuscæ annulo liturisque atris, postice cinereæ, striga obsoleta undata fusca.

Colocasia Coryli, *Ochs. Schmett. von Eur.* iv. 63. *Hübn. Verz. Schmett.* 201, 2037.

——— ———, *Röes. Ins. Bel.* i. pl. 58. *Albin, Nat. Hist. Engl. Ins.* pl. 9, f. e—h. *Deg. Ins.* i. pl. 18, f. 4, 5.

Bombyx Coryli, *Linn. Syst. Nat.* i. 2823, 50. *Faun. Suec.* 1123. *Fabr. Sp. Ins.* ii. 187, 79; *Mant. Ins.* ii. 117, 103; *Ent. Syst.* iii. 1, 444, 114. *Wien. Verz.* 55. *Fam. G.* 4. *Gmel. ed. Syst. Nat.* i. 5, 2425, 50. *Berk. Syn.* i. 136. *Donov. Nat. Hist. Brit. Ins.* ix. 45, pl. 30, 9. *Stew. El. Nat. Hist.* ii. 151. *Turt. Syst. Nat.* iii. 211. *Borkh. Schmett.* iii. 326, 123. *Esp. Schmett.* iii. pl. 50, f. 1—5. *Oliv. Enc. Méth.* v. 66, 146. *Zett. Ins. Lapp.* 926, 7.

Phalæna Coryli, *Wilkes, Pap.* 31, pl. 3, 5.

Bombyx Corylus, *Haw. Lep. Brit.* 102.

Noctua Coryli, *God. Lép. de France*, vi. 180, pl. 84, f. 6.

Colocasia scoriacea, *Hübn. Verz. Schmett.* 201, 2038.

Colocasia capreæ, *Hübn. Noct.*

Oregyia Coryli, *Meig. Handb.* 125, 55; *Syst. Beschr. Eur. Schmett.* iii. 18, 8, pl. 82, f. 4.

Demas Coryli, *Steph. Ill. Brit. Ent. Haust.* ii. 60, 1. *Curt.*

Orgya Coryli, *Boisd. Gen. et Ind. Méth.* 68, 552.

a—m. England. From Mr. Stephens' collection.

n—t. England.

v, u. Europe. From M. Becker's collection.

Genus 43. DATANA.

Corpus sat robustum, pilosum. Proboscis capitis latitudine non longior. Palpi breves, porrecti, caput non superantes; articulus 3us acutus, minimus. Thorax convexiusculus. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor sat longis. Alæ sat latæ; anticæ apud costam subrectæ, apice vix angulatæ, margine exteriore obliquo. *Mas.*—Antennæ subpectinatæ. *Fœm.*—Antennæ subserratæ.

Body rather stout, pilose; hairs rather smooth. Proboscis short, not exceeding the breadth of the head. Palpi short, porrect, not extending beyond the head; second joint very much longer than the first; third acute, very minute. Thorax somewhat convex. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout, pilose; hind tibiæ with four rather long spurs. Wings broad or rather broad. Fore wings nearly straight along the costa, hardly angular at the tips; exterior border more or less oblique; three inferior veins; first and second united at the base; third rather remote. *Male.*—Antennæ minutely pectinated; the branches successively but very slightly decreasing in length. *Female.*—Antennæ minutely serrated.

1. DATANA MINISTRA.

Luteo-fulva; thorax postice obscurior; pectus, abdomen et pedes pallide testacea; alæ anticæ fulvæ, ferrugineo quadrifasciatæ. Mas.—*Alæ anticæ fusco unimaculatæ.* Fœm.—*Alæ anticæ fusco bimaculatæ.*

Phalæna (Noctua) ministra, *Drury, Ins. Exot.* ii. 25, pl. 14, f. 3. *App.* ii.

Phalæna ministra, *Abbot & Smith, Nat. Hist. Lep. Ins. Georg.* ii. 161, pl. 81. *Oliv. Enc. Méth.* v. 69, 155.

Petasia? ministra, *Westw. ed. Drury*, ii. 27, pl. 14, f. 3.

New York.

Luteous-tawny. Thorax rather darker towards the hind part, which is pale testaceous. Pectus, abdomen and legs pale testaceous. Fore wings tawny, with four slender ferruginous bands; first band at one-fourth of the length, curved outward; second, third and fourth bands oblique; second curved backward towards the costa, beyond the discal spot or spots, the space between it and the first a little darker than the wing elsewhere; third and fourth bands very slightly undulating; a more or less distinct streak between them, very near to the fourth; under side without bands. Hind wings a little paler than the fore wings; under side pale testaceous. *Male.*—Fore wings with one discal brown spot. *Female.*—Fore wings with two discal brown spots, the outer one larger than the other. Length of the body 10 lines; of the wings 26–27 lines.

a. New York. From Mr. Milne's collection.
b. Georgia. From Mr. Milne's collection.

2. DATANA CONTRACTA.

Luteo-fulva ; thorax postice fuscus ; pectus, abdomen et pedes testacea ; alæ anticæ fulvæ, basi albido-testaceæ, fasciis quatuor fuscis extus albido testaceo marginatis ; posticæ albidæ, testaceo marginatæ.

Much resembling the preceding species, but with narrower fore wings. Luteous-tawny. Thorax brown towards the hind part, which is whitish testaceous. Pectus, abdomen and legs testaceous. Fore wings tawny, whitish testaceous about the base and along the outer side of the second, third and fourth bands; four slender brown bands; first much like that in *D. ministra*, but rather less convex; second more oblique, more retracted towards the costa, and nearer the first on the hind border; third and fourth also rather more oblique than in the preceding species; cilia brownish. Hind wings whitish, with testaceous borders. Length of the body 7 lines; of the wings 19 lines.

a, *b*. North America. From Mr. Milne's collection.

3. DATANA? ANGUINA.

Fœm. *Pallide lutea ; thoracis dorsum cinereum ; abdomen et alæ posticæ cervina ; alæ anticæ subferrugineæ nigro guttatæ, fascia margineque exteriore albidis, basi pallide luteæ.*

Phalæna anguina, *Abbot & Smith, Nat. Hist. Lep. Ins. Georg.* ii. 167, pl. 84.

Georgia.

4. DATANA? AURORA.

Flava ; thorax anticus roseus ; abdomen apice roseum ; alæ anticæ basi margineque roseis ; posticæ maris *roseæ*, fœminæ *albæ.*

Phalæna Aurora, *Abbot & Smith, Nat. Hist. Lep. Ins. Georg.* ii. 173, pl. 87.

Georgia.

Genus 44. NADATA.

Corpus sat robustum. Proboscis capitis latitudine brevior. Palpi porrecti, sat graciles, caput non superantes; articulus 3us minutus, conicus. Thorax cristatus. Pedes sat graciles, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ sat latæ; anticæ apud marginem exteriorem denticulatæ. *Mas.*—Antennæ mediocriter pectinatæ, corporis dimidio longiores. Abdomen alas posticas

non superans. Alæ anticæ apud costam subrectæ. *Fœm.*—Antennæ simplices, corporis dimidio vix longiores. Abdomen alas posticas paullo superans.

Allied to *Lophopteryx*.

Body moderately stout, pilose; hairs rather smooth. Proboscis distinct, shorter than the breadth of the head. Palpi porrect, rather slender, not extending beyond the head; second joint full twice the length of the first; third minute, conical. Thorax highly crested; the crest terminating in an acute cone. Legs rather slender, pilose; hind tibiæ with four long spurs. Wings rather broad. Fore wings with slight undulations along the exterior border, slightly acute at the tips; three inferior veins; first and second connected at the base; third rather remote. *Male.*—Antennæ moderately pectinated, more than half the length of the body. Abdomen not extending beyond the hind wings. Fore wings almost straight along the costa; exterior border less oblique than in the female. *Female.*—Third joint of the palpi more acute than in the male. Antennæ simple, hardly more than half the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Fore wings slightly convex along the costa.

1. NADATA GIBBOSA.

Mas et fœm. *Fulva, subtus albido-testacea; alæ anticæ ferrugineo conspersæ, fasciis duabus ferrugineis, guttis duabus discalibus, margine exteriore albido notato; posticæ testaceæ ad costam albidæ, fascia margineque exteriore subfulvis.*

Phalæna gibbosa, *Abbot & Smith, Nat. Hist. Lep. Ins. Georg.* ii. 163, pl. 82.

Tawny, whitish testaceous beneath. Fore wings very minutely covered with ferruginous flecks; a slightly oblique ferruginous band at one-third of the length, and another more oblique, at a little beyond two-thirds of the length; the outer border of the latter is more or less paler than the rest of the wing; two white discal dots, one behind the other; exterior border with whitish marks. Hind wings testaceous, whitish towards the costa, and with a slender indistinct tawny somewhat undulating discal band; exterior margin slightly tawny. Length of the body 7½—10 lines; of the wings 20—24 lines.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.
b, c. ———?

Genus 45. TERAGRA.

Fœm. Corpus robustum. Proboscis non conspicua. Palpi breves, graciles, porrecti, caput non superantes; articulus 3us minimus. Antennæ subserratæ. Abdomen alas posticas triente superans. Pedes validi; tibiæ posticæ calcaribus duobus sat longis apicalibus. Alæ breviusculæ, mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo.

Female. Body stout. Proboscis not visible. Palpi short, slender, porrect, not extending as far as the head; third joint very minute. Antennæ minutely serrated. Abdomen extending for one-third of its length beyond the hind wings. Legs stout; hind tibiæ with rather long apical spurs. Wings rather short, moderately broad. Fore wings straight in front, rounded at the tips, oblique along the exterior border; interior angle much rounded; discal areolet intersected by a secondary vein; second inferior vein much further from the third than from the first; third much further from the fourth than from the second.

1. Teragra conspersa.

Fœm. *Cinerea; thorax antice fuscescens; pedes antici ex parte fusco pilosi; alæ ciliis fusco notatis; alæ anticæ totæ posticæque apud costam nigro conspersæ.*

Female. Cinereous. Thorax brownish in front. Fore legs partly clothed with brown hairs. Wings with brown bands on the fringe. Fore wings over the surface and hind wings along the costa with numerous transverse marks composed of black flecks. Length the body 8 lines; of the wings 16 lines.

a. Port Natal. From Dr. Krauss' collection.

Genus 46. SOREMA.

Mas. Corpus pilosum, sat gracile. Proboscis brevissima. Palpi pilosi, porrecti, caput superantes; articulus 3us lanceolatus. Antennæ sat late pectinatæ. Abdomen alas posticas paullo superans. Pedes pilosi, sat graciles; antici late ciliatæ; tibiæ anticæ subtus fasciculatæ, posticæ calcaribus duobus apicalibus sat longis. Alæ sat latæ; anticæ apud costam fere rectæ; apice rotundatæ, margine exteriore obliquo vix denticulato.

Allied to *Pterostoma*.

Male. Body pilose, moderately slender. Proboscis very short. Palpi pilose, porrect, extending beyond the head, but not near so

long as in *Pterostoma;* second joint longer than the first; third lanceolate. Antennæ rather deeply pilose, hardly one-third of the length of the body. Abdomen extending for one-fourth of its length beyond the hind wings. Legs pilose, rather slender; fore legs deeply ciliated; fore tibiæ tufted beneath; hind tibiæ with two moderately long apical spurs. Wings moderately broad. Fore wings almost straight in front, rounded at the tips, oblique and indistinctly indented along the exterior border; second inferior vein contiguous to the first at the base; third rather remote.

1. SOREMA NUBILA.

Mas. *Cervina; caput, thoracis latera antica et pectus albida; palpi fusci, supra albidi; abdomen albidum, subtus testaceum; pedes ex parte albido pilosi, antici supra fusco vittati; alæ anticæ strigis nonnullis obliquis angulosis albidis et fuscescentibus, posticæ subtus canescentes fascia discali ferruginea undulosa.*

Fawn-colour. Head, sides of the thorax in front and pectus whitish. Palpi brown, whitish above. Antennæ whitish, with brown plumes. Abdomen whitish, testaceous beneath. Legs partly clothed with whitish hairs; fore legs striped with brown above. Fore wings with some oblique zigzag whitish and brownish streaks; fringe alternately white and brown, as is that of the hind wings. Hind wings beneath somewhat hoary, and with a ferruginous undulating discal band. Length of the body 7 lines; of the wings 15 lines.

a. Sydney. From Mr. Lambert's collection.

2. SOREMA CONTRACTA.

Mas. *Cervina; abdomen albido-testaceum; pedes antici ex parte albido pilosi; alæ posticæ testaceæ, subtus albidiores.*

Male. Fawn-colour. Antennæ whitish, with fawn-coloured branches, about half the length of the body. Abdomen whitish testaceous. Fore legs partly clothed with whitish hairs. Hind wings testaceous, more whitish beneath. Length of the body 7 lines; of the wings 14 lines.

a. ——— ?

Genus 47. ROSAMA.

Mas. Corpus sat gracile. Proboscis brevis, distincta. Palpi robusti, subarcuati, oblique ascendentes, caput superantes; articulus 3us minimus. Antennæ mediocriter pectinatæ, thorace paullo longiores. Thoracis latera fasciculata. Abdomen alas posticas paullo superans, fasciculis duobus longis apicalibus. Pedes graciles; tibiæ posticæ calcaribus duobus apicalibus longissimis. Alæ sat latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subconvexo et subobliquo, interiore excavato.

Male. Body rather slender. Proboscis short, distinct. Palpi thick, slightly curved, obliquely ascending, extending beyond the head; second joint more than twice the length of the first; third extremely minute. Antennæ moderately pectinated, rather longer than the thorax. Thorax with an oblique lappet of clavate hairs on each side. Abdomen extending a little beyond the hind wings, with two long curved tufts of hairs at the tip. Legs slender; hind tibiæ with four extremely long spurs. Wings moderately broad. Fore wings straight in front, rounded at the tips, slightly convex and oblique along the exterior border; interior border with two excavations, one next the base, the other beyond the middle, the space between them forming an acute angle; three inferior veins; first and second united at the base; third not far from the second.

1. ROSAMA STRIGOSA.

Mas. *Luteo-fulva; thorax testaceo varius; abdomen pallide fuscum, basi et apice testaceum, marginibus posticis ventreque albidis; pedes albidi; alæ anticæ roseo-ferrugineo submarginatæ, margine exteriore lunulisque exterioribus nigricantibus, fascia obliqua ferruginea, strigis transversis discalibus testaceis undulosis guttisque tribus argenteis; posticæ fuscæ, albo ciliatæ.*

Male. Orange-tawny. Antennæ testaceous. Thorax with some testaceous hairs. Abdomen pale brown, testaceous at the base and at the tip, whitish beneath and on the hind borders of the segments; apical hairs clavate, with brown tips. Legs whitish. Fore wings pinkish ferruginous in front and towards the exterior border, which is blackish, and with a row of blackish lunules enclosing an orange-tawny apical band; the pinkish ferruginous subapical part is bounded on the inner side by an oblique ferruginous band, and in the disk there are some testaceous undulating transverse streaks, and a triangular silvery spot, which is accompanied

by a silvery dot at each end; under side brown, with testaceous borders. Hind wings brown; fringe and under side whitish. Length of the body 6 lines; of the wings 12 lines.

a. ———?

Genus 48. LUSURA.

Fœm. Corpus robustum. Proboscis non conspicua. Palpi validi, longiusculi, dense pilosi, oblique ascendentes, caput superantes; articulus 3us conicus. Antennæ subpectinatæ, thorace paullo longiores. Abdomen alas posticas triente superans. Pedes sat validi, antici dense pilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat latæ; anticæ apud costam subconvexæ, apice rotundatæ, margine exteriore obliquo.

Female. Body stout. Proboscis not visible. Palpi stout, rather long, thickly pilose, obliquely ascending, extending beyond the head; third joint conical. Antennæ minutely pectinated, rather longer than the thorax. Abdomen extending for one-third of its length beyond the hind wings. Legs moderately stout; fore femora and fore tibiæ densely pilose, in which character this genus resembles *Dasychira;* hind tibiæ with four moderately long spurs. Wings moderately broad. Fore wings somewhat convex in front, rounded at the tips, oblique along the exterior border; interior angle much rounded; discal areolet intersected by a longitudinal vein; three inferior veins; second more than twice further from the third than from the first.

1. Lusura discalis.

Fœm. *Cinerea, subtus albida; caput supra et pedes antici fusca; palpi fusci, flavo uniguttati; alæ anticæ fuscæ, cinereo conspersæ, lunulis exterioribus fasciisque duabus nigro-fuscis, guttis submarginalibus ocellisque tribus discalibus albidis; posticæ albidæ, fusco late marginatæ.*

Femalæ. Cinereous, whitish beneath. Head above and palpi brown, the latter with a yellow dot on each. Antennæ brown, testaceous beneath. Fore legs mostly clothed with brown hairs. Fore wings brown, with cinereous flecks; with two blackish brown stripes, one near the base, the other subapical, and with three oblique bands of blackish brown lunules; a row of whitish dots near the exterior border; three whitish ocelli in the disk; two in front, contiguous, elongated, transverse; the third hindward, smaller,

round. Hind wings whitish, with broad brown borders. Length of the body 6 lines; of the wings 15 lines.

a. Parà. From Mr. Stevens' collection.

2. Lusura? Altrix.

Fusca; abdomen fulvescens; alæ anticæ maculis costalibus, linea submarginali, fasciisque duabus incompletis unaque integra nigris; posticæ albæ, cinereo latissime marginatæ.

Phalæna-Bombyx Altrix, *Cram. Pap. Exot.* iv. 36, pl. 307, f. 9.
Gynæphora Altrix, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Dasychiræ Coloratæ*) 161, 1675.

Surinam.

Genus 49. THOSEA.

Mas. Corpus robustum. Proboscis non conspicua. Palpi crassi, pilosi, porrecti, caput superantes; articulus 3us parvus, obtusus. Antennæ simplices, graciles, thorace paullo longiores. Abdomen alas posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ latiusculæ; anticæ apud costam rectæ, apice vix angulatæ, margine exteriore obliquo integro, interiore non fasciculato.

Male. Body stout. Proboscis not visible. Palpi stout, pilose, porrect, extending some distance beyond the head; third joint small, obtuse. Antennæ slender, simple, a little longer than the thorax. Abdomen hardly extending as far as the hind wings. Legs stout, pilose; hind tibiæ with four rather long spurs. Wings rather broad. Fore wings straight along the costa, hardly angular at the tips, oblique and entire along the exterior border; interior angle rounded; interior border not tufted; second inferior vein much nearer to the first than to the third; third much nearer to the second than to the fourth.

1. Thosea unifascia.

Mas. *Cervina; alæ anticæ fusco subconspersæ necnon gutta discali fasciaque obliqua integra fuscis.*

Male. Fawn-colour. Fore wings and the under side of the hind wings thinly sprinkled with brown. Fore wings with a discal brown dot, beyond which there is a slender oblique straight brown band. Length of the body 6½ lines; of the wings 16 lines.

a. East Indies. From Archdeacon Clerk's collection.

Genus 50. SETORA.

Fœm. Corpus robustum. Proboscis brevissima. Palpi validi, porrecti, pilosi, caput vix superantes; articulus 3us minimus. Antennæ simplices. Abdomen alas posticas non superans. Pedes validi, dense ciliati; tibiæ posticæ calcaribus duobus apicalibus sat longis. Alæ latæ, non longæ; anticæ apud costam vix convexæ, margine exteriore obliquo subconvexo, interiore vix concavo.

Female. Body stout. Proboscis very short. Palpi stout, porrect, pilose, not long, extending very little beyond the head; second joint much longer than the first; third very minute. Antennæ simple, about half the length of the body. Abdomen not extending beyond the hind wings. Legs stout, thickly ciliated; hind tibiæ with moderately long apical spurs. Wings broad, not long. Fore wings hardly convex along the costa, slightly convex on the exterior border, which forms an obtuse angle with the interior border; the latter is indistinctly concave; second inferior vein nearer to the first than to the third; fourth remote, springing from near the base of the wing.

1. SETORA NITENS.

Fœm. *Cervina; alæ anticæ nitentes fascia strigaque furcata obscurioribus; posticæ pallidiores.*

Female. Fawn-colour. Fore wings shining, with a broad darker changeable band before the middle; from the front of this band a slender oblique darker streak proceeds to near the base of the interior border, and at half its length emits a fork to somewhat beyond the middle of the same border. Hind wings a little paler than the fore wings. Length of the body 6 lines; of the wings 16 lines.

a. Java. From the East India Company's collection.

Genus 51. NIODA.

Fœm. Corpus sat gracile. Proboscis non conspicua. Palpi breviusculi, porrecti, pilosi, caput vix superantes; articulus 3us minutus, conicus, acuminatus. Antennæ subpectinatæ, thorace non longiores. Abdomen alas posticas paullo superans. Pedes sat graciles, antici dense pilosi; tibiæ posticæ calcaribus quatuor mediocriter longis; tarsi intermedii fasciculati. Alæ sat longæ et angustæ; anticæ apud costam subapicalem convexæ, apice rotundatæ, margine exteriore obliquo.

Female. Body rather slender. Proboscis not visible. Palpi rather short, porrect, pilose, extending very little beyond the head; third joint minute, conical, acuminated. Antennæ minutely pectinated, not longer than the thorax. Abdomen extending for one-fourth of its length beyond the hind wings. Legs rather slender; fore femora and fore tibiæ thickly pilose; hind tibiæ with four moderately long spurs; middle tarsi with tufts of hairs. Wings rather long and narrow. Fore wings convex in front towards the tips, which are rounded, oblique along the exterior border; interior angle obtuse; discal areolet indistinctly intersected; first and second inferior veins nearly contiguous at the base; third much further from the fourth than from the second.

1. NIODA FUSIFORMIS.

Fœm. *Pallide cervina; alæ anticæ albido-cinereæ, fasciis duabus latis marginatis pallide fuscis, strigisque transversis exterioribus pallide testaceis.*

Female. Pale fawn-colour. Fore wings gray, here and there whitish, and with two broad pale brown bands, one basal, edged with dark brown, the other occupying more than the apical third part, partly and irregularly bordered with dark brown, and intersected by two undulating transverse pale testaceous streaks along the exterior border. Length of the body 5½—6½ lines; of the wings 16—18 lines.

a. Ceylon. From the Rev. J. Wenham's collection.
b. North India. From Mr. Stevens' collection.
c. North India. From Mr. L. James' collection.

Genus 52. CHILENA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi porrecti, pilosi, breviusculi, caput vix superantes; articulus 3us minimus. Antennæ mediocriter pectinatæ, thoracis latitudine. Abdomen alas posticas non superans. Pedes sat validi; tibiæ posticæ calcaribus minutis apicalibus. Alæ sat latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo convexo.

Male. Body moderately stout. Proboscis not visible. Palpi porrect, pilose, rather short, extending very little beyond the head; third joint very minute. Antennæ moderately pectinated, as long as the thorax. Abdomen extending as far as the hind wings. Legs moderately stout; hind tibiæ with minute apical spurs. Wings

rather broad. Fore wings straight along the costa, rounded at the tips, oblique and convex along the exterior border; interior angle rounded; discal areolet intersected by a distinct vein; three inferior veins; second much further from the third than from the first.

1. Chilena similis.

Mas. *Albida; palpi supra lutei; pedes antici supra cervini macula discali fasciisque tribus albidis fasciisque nonnunquam obsoletis fuscis; posticæ fascia cervina, aut cervinæ fascia fuscescente.*

Male. Whitish. Palpi luteous above. Antennæ with pale luteous branches. Fore legs fawn-colour above. Fore wings pale fawn-colour, with a white discal spot and two oblique whitish bands, the outer one marginal and slightly varied with testaceous. Hind wings with an indistinct pale fawn-coloured band. Length of the body 5—6 lines; of the wings 12—14 lines.

Var. β. Fore wings fawn-colour, with a white discal spot and with three oblique brown bands; first band joining the discal spot; the third bordered with white on the inner side. Hind wings very pale fawn-colour, with an indistinct brownish band.

a, *b*. North India. Presented by General Hearsay.
c. Nepaul. Presented by E. Doubleday, Esq.

Genus 53. XULORA.

Mas. Corpus sat robustum. Proboscis brevis. Palpi breves, caput non superantes; articulus 3us lanceolatus, 2i dimidio brevior. Antennæ mediocriter pectinatæ, dimidio fere apicali nudo. Abdomen alas posticas dimidio superans. Pedes sat validi, pilosi; tibiæ posticæ calcaribus longis apicalibus. Alæ angustæ; antice apud costam rectæ, apice vix angulatæ, margine exteriore perobliquo, interiore recto.

Male. Body moderately stout. Proboscis short, not so long as the breadth of the head. Palpi short, not extending so far as the head; first joint short; third lanceolate, not half the length of the second. Antennæ moderately pectinated to a little beyond half the length, simple from thence to the tips. Abdomen extending for half its length beyond the hind wings. Legs moderately stout; femora and tibiæ pilose; hind tibiæ with long apical spurs. Wings narrow. Fore wings straight along the costa, hardly angular at the

tips, very oblique along the exterior border; interior border straight; three inferior veins; second rather further from the third than from the first.

1. Xulora lignosa.

Mas. *Viridi-fusca; palpi et antennæ fulva; pectus et pedes testacea; abdomen luteum, subtus testaceum; alæ anticæ cervinæ, albo varii, nigro conspersæ; posticæ albæ, fusco marginatæ.*

Male. Greenish brown. Palpi and antennæ tawny. Pectus and legs testaceous. Abdomen luteous, testaceous beneath. Fore wings fawn-colour, partly white in the disk and at the tips, and with some black flecks towards the base and about the exterior border; under side paler. Hind wings white, brown along the borders; veins brown towards the borders. Length of the body 7½ lines; of the wings 17 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 54. LAMNIS.

Corpus robustum. Proboscis non conspicua. Palpi breves, sat graciles, caput non superantes; articulus 3us conicus, acutus, 2o vix brevior. Antennæ thorace vix breviores. Pedes validi, pilosi; tibiæ posticæ calcaribus minutis apicalibus. Alæ sat latæ; anticæ apud costam apicalem vix convexæ, apice rotundatæ, margine exteriore obliquo. *Mas.*—Antennæ late pectinatæ, dimidio apicali serratæ. Abdomen alas posticas paullo superans. *Fœm.*—Antennæ simplices. Abdomen alas posticas non superans.

Body stout. Proboscis very short or obsolete. Palpi short, rather slender, not extending so far as the head; joints of nearly equal length; third acute-conical. Antennæ almost as long as the thorax. Legs stout, pilose; hind tibiæ with minute apical spurs. Wings moderately broad. Fore wings straight along the costa till near the tips, where they are very slightly convex, rounded at the tips, oblique along the exterior border; interior angle rounded; second inferior vein full twice further from the third than from the first; third a little further from the fourth than from the second. *Male.*—Antennæ deeply pectinated to half the length, serrated from thence to the tips. Abdomen extending for one-fourth of its length beyond the hind wings. *Female.*—Antennæ simple. Abdomen extending as far as the hind wings.

1. LAMNIS DIVISA.

Mas et fœm. *Albida; caput supra nigrum; thorax nigro bifasciatus; abdominis dorsum rufum; alæ anticæ nigro conspersæ et trifasciatæ, posticæ basi et apud marginem interiorem rufæ.*

Male and female. Whitish. Head above black. Antennæ with tawny branches. Thorax with two black bands in front, the hind one interrupted. Abdomen above red. Fore wings with blackish flecks, and with three slight blackish bands; first near the base; second angular, beyond the middle; third zigzag, nearer the exterior border. Hind wings red towards the base and along the interior border; veins elsewhere brown. Length of the body 7—8 lines; of the wings 19—24 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 55. SURETA.

Mas. Corpus robustum. Proboscis non conspicua. Palpi validi, porrecti, pilosi, caput non superantes; articulus 3us minutus, breviconicus. Antennæ thorace longiores, triente basali mediocriter pectinatæ, inde ad apices serratæ. Abdomen alas posticas paullo superans. Pedes validi; tibiæ late ciliatæ, posticæ calcaribus duobus parvis apicalibus. Alæ mediocriter latæ longæque; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo.

Male. Body stout. Proboscis obsolete? Palpi porrect, stout, pilose, not extending beyond the head; first joint short; third minute, short-conical. Antennæ longer than the thorax, moderately pectinated to one-third of the length, serrated from thence to the tips. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout, pilose; tibiæ deeply ciliated; hind tibiæ with small apical spurs. Wings moderately broad and long. Fore wings straight along the costa, rounded at the tips, oblique along the exterior border; interior border slightly excavated towards the interior angle; first and second inferior veins contiguous at the base; third nearly thrice further from the fourth than from the second.

1. SURETA TRIPARS.

Mas. *Ferruginea; antennæ et abdomen fulva, hoc apice ferrugineum; alæ anticæ dimidio antico fuscæ, subtus albidæ; posticæ albæ, margine interiore fulvescente.*

Male. Ferruginous. Antennæ and abdomen tawny, the latter ferruginous towards the tip. Fore wings brown along the costa for three-fourths of the length and for full half the breadth; under side whitish about the borders, and with whitish veins. Hind wings white, somewhat tawny about the interior border. Length of the body 7 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 56. DEDIAMA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi validi, longiusculi, pilosi, subascendentes, caput superantes; articulus 3us minutus, conicus. Antennæ latissime pectinatæ, thorace non longiores. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, sat latæ; anticæ apud costam rectæ, apice vix acuminatæ, margine exteriore obliquo.

Male. Resembles the *Noctuites*. Body moderately stout. Proboscis not apparent. Palpi stout, pilose, rather long, slightly ascending, extending beyond the head; third joint minute, conical. Antennæ with an elongated process on each at the base, very deeply pectinated, as long as the thorax. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings moderately broad, rather long. Fore wings straight along the costa, hardly acuminated at the tips, oblique along the exterior border; interior angle obtuse; discal areolet intersected by a secondary vein; first and second inferior veins united at the base; third about twice further from the fourth than from the second.

1. DEDIAMA ANTICA.

Mas. *Pallide cervina; caput et thorax fusco varia; pectus et femora albida; tibiæ tarsique fusco fasciata; alæ anticæ fusco strigatæ, maculis duabus aut tribus inferioribus discalibus fuscis; posticæ pallidæ fusco marginatæ.*

Male. Pale fawn-colour. Head, palpi partly above and at the tips, and thorax on each side and partly in the disk, dark brown. Antennæ testaceous, with ferruginous branches. Pectus and femora whitish. Tibiæ and tarsi testaceous, with brown bands. Fore wings irregularly marked with brown streaks, which are mostly lanceolate; under side pale, with two or three discal brown spots. Hind wings pale, with a brown border above and two brown spots beneath, one discal, the other marginal. Length of the body 9 lines; of the wings 19 lines.

a. ——— ? Presented by E. Doubleday, Esq.

Genus 57. RILIA.

Fœm. Corpus vix robustum. Proboscis non conspicua. Palpi graciles, porrecti, subtus longe pilosi, caput paullo superantes; articulus 3us longiconicus, acuminatus. Antennæ mediocriter pectinatæ. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ anticæ extus ciliatæ, posticæ calcaribus quatuor longiusculis. Alæ sat longæ; anticæ subangustæ, sublanceolatæ, apud costam subconvexæ, apice subacuminatæ, margine exteriore perobliquo.

Female. Body hardly stout. Proboscis not visible. Palpi slender, porrect, with long hairs beneath, extending a little beyond the head; third joint elongate-conical, acuminated. Antennæ moderately pectinated. Abdomen extending as far as the hind wings. Legs rather slender; fore tibiæ and fore tarsi at the base with long hairs on the outer side; hind tibiæ with four moderately long spurs. Wings rather long. Fore wings rather narrow, sublanceolate, slightly convex along the costa, almost acuminated at the tips, extremely oblique along the exterior border; interior angle extremely obtuse; discal areolet intersected by a secondary vein; second inferior vein hardly further from the third than from the first; third nearly thrice further from the fourth than from the second.

1. Rilia lanceolata.

Fœm. *Cervina; abdomen pallide testaceum; femora posteriora albido pilosa; alæ anticæ striyis nigricantibus et albidis fasciaque exteriore submarginali gracili nigra; posticæ albido-testaceæ.*

Female. Fawn-colour. Abdomen pale testaceous. Posterior femora with whitish hairs. Fore wings with irregular blackish and whitish streaks, the latter chiefly near the borders; a submarginal

slender black band by the exterior border. Hind wings whitish testaceous. Length of the body 6—7 lines; of the wings 17—20 lines.

a. Silhet. From Mr. Argent's collection.
b. Ceylon. From the Rev. J. Wenham's collection.

Genus 58. NERICE.

Mas. Corpus cylindricum, sat validum. Proboscis nulla. Palpi longiusculi, porrecti, subpilosi, caput superantes; articulus 3us minutus, conicus. Antennæ mediocriter pectinatæ, thorace longiores. Abdomen alas posticas triente superans. Pedes sat graciles, subpilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subobliquo.

Male. Body cylindrical, moderately stout. Proboscis obsolete or very short. Palpi porrect, rather long, minutely pilose, extending some distance beyond the head; second joint twice the length of the first; third minute, conical. Antennæ moderately pectinated, longer than the thorax. Abdomen more than twice the length of the thorax, extending for one-third of its length beyond the hind wings. Legs rather slender, slightly pilose; hind tibiæ with four moderately long spurs. Wings rather narrow. Fore wings almost straight along the costa, rounded at the tips, rather oblique along the exterior border; three inferior veins; second very little nearer to the first than to the third.

1. Nerice bidentata.

Mas. *Pallide fusca; caput, palpi et thoracæ obscuriora; alæ anticæ postice albidæ, intermedia angulosa strigaque nigris.*

Male. Pale brown. Head, palpi and thorax in front darker brown. Fore wings whitish along the interior border; this whitish part is twice deeply indented by the black stripe which divides it from the brown, and is accompanied in front at its tip by a black streak. Under side of the four wings whitish brown, with an indistinct oblique middle blackish band. Length of the body 6 lines; of the wings 16 lines.

a. Trenton Falls, New York. Presented by E. Doubleday, Esq.

2. Nerice bifascia.

Fœm. *Albido-cervina; thorax strigis duabus subocellaribus fuscis; pedes antici supra fuscescentes; alæ anticæ apud costam fuscæ fasciisque duabus duplicatis fuscis, exteriore furcata; posticæ pallide fuscæ, fascia discali subobsoleta albida.*

Female. Whitish fawn-colour. Antennæ brown. Thorax with an incomplete brown ocellus on each side. Fore legs brownish above. Fore wings partly brown in front and with two double brown bands, the outer one emitting a fork to the tip of the wing; fringe brown at the base. Hind wings pale brown, with an indistinct whitish middle band. Length of the body 7 lines; of the wings 16 lines.

a. ———?

3. Nerice pallida.

Mas. *Pallide testacea; caput et palpi supra fusca; thorax fusco vittatus; pedes antici supra fuscescentes; alæ anticæ fasciis duabus aut tribus subobsoletis albidis, apices versus ferrugineæ fascia interrupta obliqua fusca.*

Male. Pale testaceous. Head and palpi above brown. Antennæ brown. Thorax with a brown stripe. Fore legs brownish above. Fore wings with two or three indistinct whitish bands, partly ferruginous and with an interrupted oblique brown band near the tips. Length of the body 8 lines; of the wings 20 lines.

a. Nepaul. Presented by Major-General Hardwicke.

Genus 59. TIFAMA.

Fœm. Corpus sat gracile. Proboscis non conspicua. Palpi sat longi et graciles, oblique ascendentes, subtus longe pilosi, caput superantes; articulus 3us minutus. Antennæ graciles, subserratæ, thorace longiores. Abdomen alas posticas longe superans. Pedes sat graciles; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat longæ et angustæ; anticæ fusiformes, apud costam subconvexæ, apice rotundatæ, margine exteriore perobliquo.

Mesoscia, p., *Hübn. Verz. Schmett.* 194.
Hypopta, p.? *Hübn. Verz. Schmett.* 195.

Female. Body rather slender. Proboscis not visible. Palpi rather long and slender, obliquely ascending, with long hairs

beneath, extending rather beyond the head; third joint minute. Antennæ slender, minutely serrated, longer than the thorax. Abdomen extending for rather less than half its length beyond the hind wings. Legs rather slender; hind tibiæ with four rather long spurs. Wings rather long and narrow. Fore wings fusiform, slightly convex along the costa, rounded at the tips, very oblique along the exterior border; interior angle much rounded; discal areolet intersected by a secondary vein; three inferior veins; second nearly thrice further from the third than from the first.

1. Tifama Simois.

Fœm. *Cinereo-fusca; alæ anticæ vitta discali subduplicata nigra, macula apicali testacea, lunulisque exterioribus nigris; posticæ cinereæ.*

Phalæna-Bombyx Simois, *Cram. Pap. Exot.* iv. 39, pl. 308, f. F.
Mesoscia Semois, *Hübn. Verz. Schmett.* 194, 1990.

Surinam.

Female. Cinereous-brown. Fore wings with a black discal stripe, which is partly double, and is curved forward along the exterior border; a testaceous mark by the tip of the costa, and a row of black lunules between the exterior border and the black stripe. Hind wings cinereous. Length of the body 8 lines; of the wings 19 lines.

a, *b*. Parà. From Mr. Stevens' collection.

2. Tifama? Ziliante.

Fœm. *Cana; alæ anticæ nigro lituratæ.*

Phalæna-Bombyx Ziliante, *Cram. Pap. Exot.* iv. 191, pl. 384, f. C.
Hypopta Ziliante, *Hübn. Verz. Schmett.* 195, 2002.

Female. Hoary. Antennæ simple, longer than the thorax. Abdomen extending for half its length beyond the hind wings. Fore wings with numerous black marks, which are most prevalent along the borders and in a band beyond the middle; costa slightly convex; tips rounded; exterior border oblique; interior angle much rounded.

Surinam.

Genus 60. RIGEMA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi pilosi, brevissimi; articulus 3us minimus. Antennæ simplices, thorace paullo longiores. Abdomen alas posticas plus triente superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat angustæ; anticæ apud costam fere rectæ, apice subacuminatæ, margine exteriore obliquo.

Male. Resembles the *Noctuites*. Body moderately stout. Proboscis not visible. Palpi pilose, very short; third joint very small. Antennæ simple, a little longer than the thorax. Abdomen extending for a little more than one-third of its length beyond the hind wings. Legs stout, pilose; hind tibiæ with four rather long spurs. Wings rather narrow. Fore wings almost straight along the costa, somewhat acuminated at the tips, oblique along the exterior border; interior angle much rounded; discal areolet intersected by a secondary vein; three inferior veins; first and second nearly contiguous at the base; third remote.

1. Rigema vittata.

Mas. *Albido-flava; caput et pectus antice thoracisque latera antica lutea; abdomen vitta dorsali lata fusca; alæ anticæ vittis duabus rufescentibus.*

Male. Whitish yellow. Head in front, antennæ, sides of the thorax in front and fore part of the pectus luteous. Abdomen with a broad dorsal brown stripe which does not extend to the tip. Fore wings with two reddish stripes, which are connected on the exterior border, one in the disk, the other along the interior border. Length of the body 6—7 lines; of the wings 12—14 lines.

a—c. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 61. NOLECA.

Fœm. Corpus sat robustum. Proboscis non conspicua. Palpi porrecti, pilosi, capnt paullo superantes; articulus 3us minutus, fusiformis. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ mediocriter latæ; anticæ apud costam convexæ, apice rotundatæ, margine exteriore obliquo, angulo interiore bene determinato.

Female. Body moderately stout. Proboscis not visible. Palpi porrect, pilose, extending a little beyond the head; third joint

minute, fusiform. Abdomen extending as far as the hind wings. Legs slender; hind tibiæ with four long spurs. Wings moderately broad. Fore wings convex in front, rounded at the tips, oblique along the exterior border; interior angle obtuse, well-defined; discal areolet intersected by a secondary vein; second inferior vein much further from the third than from the first; third much further from the fourth than from the second.

1. NOLEOA BASIGUTTA.

Fœm. *Cervina, subtus testacea; alæ anticæ gutta basali lunulisque marginalibus nigris, strigis tribus anticis macularibus obliquis nigro-fuscis, intermedia antice albo postice fusco marginata.*

Female. Fawn-colour, more testaceous beneath. Fore wings with a black dot at the base; exterior border with a row of black lunules, which increase in size from the tip of the wing to the interior angle; three somewhat macular oblique blackish brown streaks in front of the disk; middle one with a whitish space in front and a brownish space behind. Length of the body 5 lines; of the wings 14 lines.

a. ———? Presented by W. F. Evans, Esq.

Genus 62. EPISEMA.

Corpus robustum. Proboscis capitis latitudine non longior. Palpi sat longi, porrecti, pilosi, caput superantes; articulus 3us linearis, 2i dimidio longior. Antennæ thorace multo longiores. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus minutis apicalibus. Alæ sat longæ, vix latæ; anticæ apud costam fere rectæ, apice rotundatæ, margine exteriore integro perobliquo.

Episema, *Ochs. Schmett. von Eur.* iv. 65; *Treitschke; Steph.*
Graphiphora, p., *Hübn.*
Bombyx, p., *Linn.; Fabr.; Gmel.; Oliv.; Hübn.; Haw.; God.*
Disphragis, p., *Hübn. Verz. Schmett.* 194.
Noctua, p., *God.*
Diloba, *Boisd. Gen. et Ind. Méth.* 88; *Duponch.*

Body stout. Proboscis distinct, not longer than the breadth of the head. Palpi moderately long, porrect, pilose, extending beyond the head; third joint linear, more than half the length of the second. Antennæ much longer than the thorax. Abdomen extending for one-fourth of its length beyond the hind wings. Legs

stout, pilose; hind tibiæ with minute apical spurs. Wings moderately long, hardly broad. Fore wings almost straight along the costa, rounded at the tips, very oblique along the exterior border; discal areolet intersected by a secondary vein; second inferior vein a little further from the third than from the first; third more than four times further from the fourth than from the second. *Male.*—Antennæ rather deeply pectinated. *Female.*—Antennæ serrated.

Europe.

1. Episema cæruleocephala.

Alæ anticæ cinereo canæ, stigmatibus albidis coadunatis inter strigas duas fuscas, fasciaque marginali cinerea; posticæ albidæ, angulo anali nigro strigato.

Episema cæruleocephala, *Ochs. Schmett. von Eur.* iv. 65. *Treit. Schmett.* v. 112, 1. *Steph. Ill. Brit. Ent. Haust.* ii. 14, 1. *Duponch. Pap. de France*, vi. 3, pl. 85, f. 1. *Meig. Handb.* 183, 15; *Syst. Beschr. Eur. Schmett.* iii. 59, 1, pl. 89, f. 8. *Zett. Ins. Lapp.* 934, 1.

Bombyx cæruleocephala, *Linn. Syst. Nat.* ii. 826; *Faun. Succ.* 117. *Gmel. ed. Syst. Nat.* i. 5, 2429, 59. *Fabr. Sp. Ins.* ii. 185, 72; *Mant. Ins.* ii. 117, 93; *Ent. Syst.* iii. 1, 440, 102. *Wien. Verz.* 59, M. 3. *Borkh. Schmett.* iii. 352, 132. *Esp. Schmett.* iii. pl. 58, f. 1—4. *Hübn. Bomb.* pl. 45, f. 196. *Larv. Lep.* iii. *Bomb.* ii. *Veræ*, T, a, b, fig. 2. *Berk. Syn.* i. 132. *Don. Nat. Hist. Brit. Ins.* iii. 75, pl. 100. *Stew. El. Nat. Hist.* ii. 153. *Turt. Syst. Nat.* iii. 208.

——— ———, *Göed. Ins.* i. 61. *List. Göed.* (Angl.) 155, f. 47. (Lat.) 121, f. 47. *Ray, Ins.* 163, 17. *Albin, Ins.* pl. 13, f. 17. *Réaum. Ins.* 1, pl. 18, f. 6—9. *Frisch. Ins.* 10, pl. 3, f. 4. *Merian, Ins. Eur.* pl. 9.

Phalæna cæruleocephala, *Wilkes*, 6, pl. 12.

Bombyx cæruleocephalus, *Haw. Lep. Brit.* 105.

Disphragis cæruleocephala, *Hübn. Verz. Schmett.* 1194, 1989.

Noctua cæruleocephala, *God. Lép. de France*, vi. 187, pl. 85, f. 1.

Diloba cæruleocephala, *Boisd. Gen. et Ind. Méth.* 88, 687.

a—h. England. From Mr. Stephens' collection.
i—k. England.
l. Europe. From M. Becker's collection.
m. ———? Presented by the Entomological Club.

Africa.

2. Episema? Orana.

Caput et thorax piloso cinerascentia; antennæ rufescentes; abdomen flavo subnigricans; alæ anticæ supra fusco tinctæ, in medio vitta fusca trajectæ, antice birufescente maculatæ, fimbria fusco rubescente septemque nigro maculata, subtus fuscæ; alæ posticæ albicanti-cinerascentes, in medio fasciola arcuata fusca ornatæ, subtus albicante subrubescente tinctæ.

Episema Orana, *Lucas, Explor. Scient. de l'Alger. Anim. Artic.* iii. 384, 103, pl. 3, f. 7.

Algiers.

Asia.

3. Episema? murina.

Murino-subcinerea; alæ anticæ fuscescente adumbratæ, strigis transversis, interna quadridentata, externa incurva, lineaque basali horizontali, macula anteriore rotundata cum puncto incluso, macula postica elongata linea transversa notata, nigris; posticæ basi albæ exteriore fuscæ, albido fimbriatæ; thorax subcinereo, abdomen albido longe pilosa.

Dibola murina, *Ménétriés, Mém. Acad. Imp. Sci. St. Petersb.* 6me *Sér. Sci. Nat.* vi. 284. 818, pl. 6, f. 8.

Steppes beyond the Ural Mountains.

Genus 63. RIPISA.

Mas. Corpus sat gracile. Proboscis brevissima. Palpi breves, validi, pilosi, oblique ascendentes; articulus 3us minimus. Antennæ late pectinatæ, thorace paullo longiores. Abdomen alas posticas triente superans. Pedes sat graciles, longe pilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ mediocriter latæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriore obliquo.

Male. Body rather slender. Proboscis very short. Palpi short, stout, pilose, obliquely ascending; first joint short; third very minute. Antennæ deeply pectinated, a little longer than the thorax; the branches very short towards the tips. Abdomen extending for one-third of its length beyond the hind wings. Legs rather slender; femora and tibiæ with long hairs; hind tibiæ with four rather long spurs. Wings moderately broad. Fore wings

hardly convex in front, rounded at the tips, oblique along the exterior border; interior angle much rounded; three inferior veins; second much nearer to the first than to the third.

1. RIPISA VIRIDESCENS.

Mas. *Obscure viridis; abdomen testaceum, subtus albidum; pedes albidi; alæ anticæ ferrugineo nigro alboque notatæ; posticæ albidæ, apud costam virides.*

Male. Dull green. Antennæ brownish. Abdomen testaceous, whitish beneath. Legs whitish. Fore wings with ferruginous, black and white marks; the black and white marks chiefly on the veins; under side whitish, greenish along the costa. Hind wings whitish, green, mingled with white about the costa. Length of the body 7 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 64. NEMETA.

Mas. Corpus robustum. Proboscis non conspicua. Palpi validi, porrecti, pilosi, caput superantes; articulus 3us minimus. Antennæ mediocriter pectinatæ, thorace paullo longiores. Abdomen alas posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ sat latæ, non longæ; anticæ apud costam subrectæ, apice angulatæ, margine exteriore vix obliquo.

Male. Body stout. Proboscis obsolete or very short. Palpi porrect, stout, pilose, extending some little distance beyond the head; first joint very short; second long; third very minute. Antennæ moderately pectinated, rather longer than the thorax. Abdomen not extending beyond the hind wings. Legs stout, pilose; hind tibiæ with rather long apical spurs. Wings rather broad, not long. Fore wings almost straight along the costa, nearly rectangular at the tips, not oblique along the exterior border, except towards the interior angle, which is much rounded. Hind wings slightly convex along the costa.

1. NEMETA BASIFUSCA.

Mas. *Fusca; caput supra thoracisque discus testacea; abdomen vitta dorsali fulva; tarsi albo fasciati; alæ anticæ basi fasciisque duabus subobliquis obscure fuscis.*

Male. Brown. Head above and disk of the thorax testaceous. Palpi dark brown. Antennæ testaceous. Abdomen with a tawny dorsal stripe. Tarsi with white bands; tips of the fore coxæ and of the fore tibiæ white. Wings very pale brown, shining, slightly lurid. Fore wings dark brown towards the base, and with two slight oblique dark brown bands which are not parallel to each other; the inner one extending from three-fourths of the length of the costa to the middle of the interior border, the other from near the tip of the costa to the interior angle. Length of the body 6 lines; of the wings 16 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 65. DOCYNA.

Mas. Corpus cylindricum, pilosum, sat longum. Proboscis non conspicua. Palpi porrecti, graciles, vix arcuati, caput non superantes; articulus 3us sublanceolatus, 1i dimidio brevior. Antennæ subpectinatæ, thorace paullo longiores. Abdomen alas posticas dimidio superans. Pedes longe pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ perangustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore vix obliquo.

Male. Body cylindrical, pilose, moderately long. Proboscis obsolete? Palpi porrect, slender, very slightly curved, not extending beyond the head; first joint short; third sublanceolate, less than half the length of the second. Antennæ slightly pectinated, rather longer than the thorax. Abdomen rather long, extending for half its length beyond the hind wings. Legs with long hairs; hind tibiæ with four long spurs. Wings very narrow. Fore wings straight along the costa, rounded at the tips; exterior border hardly oblique, forming a continuous curve with the interior one; three inferior veins; third near to the second, but about twice further from it than the second is from the first.

1. Docyna triplaga.

Mas. *Alba; thoracis discus fuscus; alæ anticæ macula magna apicali fusca; apice cervino marginatæ; posticæ guttis exterioribus cervinis.*

Male. White. Disk of the thorax brown. Fore wings with a large brown round spot occupying the disk at each tip; border fawn-colour about each tip. Hind wings with fawn-coloured dots

along the exterior border. Length of the body 8 lines; of the wings 15 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 66. SANEGA.

Mas. Corpus valde crassum et pilosum. Proboscis non conspicua. Palpi breves, porrecti, pilosi, vix arcuati, caput non superantes; articulus 3us minimus. Antennæ latissime pectinatæ, thorace non longiores. Abdomen alas posticas non superans. Pedes robusti, pilosissimi. Alæ sat latæ; anticæ apud costam rectæ, apice rotundatæ.

Male. Body very stout and pilose. Proboscis obsolete or none. Palpi porrect, short, pilose, very slightly curved, hardly extending so far as the head; first joint very short; third very minute. Antennæ very deeply pectinated, as long as the thorax. Abdomen extending as far as the hind wings. Legs very stout and pilose; the four spurs of the hind tibiæ hidden by the hairs. Wings moderately broad. Fore wings straight along the costa; the exterior and the interior borders forming a continuous gentle curve without any indication of an angle; three inferior veins; first and second approximate at the base; third remote.

1. SANEGA ORCUS.

Mas. *Obscure fusca; antennæ testaceæ; abdomen et pedes pilis nonnullis sordide albido-testaceis; alæ anticæ purpurascentes, apud costam testaceæ, guttis ciliaribus testaceis; posticæ pallidiores, ciliis albido-testaceis.*

Male. Dark brown. Antennæ testaceous. Abdomen and legs partly clothed with dingy whitish testaceous hairs. Fore wings with a purplish bloom, testaceous along the costa, and with testaceous spots on the brown fringe. Hind wings paler brown, with a whitish testaceous fringe. Length of the body 8 lines; of the wings 21 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 67. LAGELA.

Corpus robustum. Proboscis non conspicua. Palpi porrecti, vix arcuati, caput non superantes; articulus 3us minutus, conicus. Antennæ thorace paullo longiores. Abdomen alas posticas vix superans. Pedes graciles, longe pilosi; tarsi longi; tibiæ posticæ calcaribus quatuor apicalibus sat longis. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ vix pectinatæ.

Body stout, with short hairs. Proboscis very short or obsolete. Palpi porrect, hardly curved, moderately long, not extending beyond the head; first joint very short; second long; third minute, conical. Antennæ a little longer than the thorax. Abdomen extending very little beyond the hind wings. Legs slender; femora and tibiæ with long hairs; tarsi long; hind tibiæ with four moderately long apical spurs. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ very minutely pectinated.

1. Lagela fulva.

Ferrugineo-fulva, subtus pallidior; caput, thorax pedesque posteriores albido varia; alæ anticæ fasciis duabus obliquis angulosis rufescentibus.

Ferruginous-tawny, paler beneath. Thorax at the base of each fore wing and the greater part of the head whitish. Antennæ testaceous. Abdomen testaceous beneath. Posterior femora and tibiæ with whitish hairs. Fore wings with two oblique zigzag reddish bands, the inner one not extending to the borders, the other joining the costa near the tip of the latter. Length of the body 7—8 lines; of the wings 16—21 lines.

Rio Janeiro. In Mr. Fry's collection.

2. Lagela curvivitta.

Mas. *Fulva, subtus pallidior; caput albido varium; alæ anticæ fasciis duabus arcuatis albido-testaceis intus fusco marginatis.*

Male. Tawny, paler beneath. Head whitish, tawny about the antennæ and between them. Antennæ testaceous. Fore wings with two curved whitish testaceous bands, more or less bordered with brown on the inner side, not parallel to each other, the inner one extending from the base to the tip of the costa, the other along the exterior border. Hind wings paler. Length of the body 7½ lines; of the wings 16 lines.

Var. β. Inner band of the fore wings forked in front, the space between it and the costa wholly brown.

Rio Janeiro. In Mr. Fry's collection.

Genus 68. SIDANA.

Mas. Corpus sat gracile. Proboscis longa. Palpi validi, porrecti, pilosi, caput non superantes; articulus 3us conicus, minimus. Antennæ latissime pectinatæ, thorace non longiores. Abdomen alas posticas paullo superans. Pedes longiusculi, sat graciles; tibiæ posticæ calcaribus quatuor longis. Alæ longiusculæ, mediocriter latæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore postico perobliquo.

Male. Body rather slender. Proboscis long. Palpi porrect, stout, pilose, not extending beyond the head; second joint much longer than the first; third conical, very minute. Antennæ very deeply pectinated, not longer than the thorax. Abdomen extending for one-fourth of its length beyond the hind wings. Legs rather long and slender; hind tibiæ with four long spurs. Wings moderately broad, rather long. Fore wings straight in front, nearly rectangular at the tips, very oblique along the hinder part of the exterior border; interior angle extremely obtuse; three inferior veins; second full four times further from the third than from the first.

1. Sidana bifacies.

Mas. *Cervina; thorax antice nigro fasciatus; pectus et abdomen testacea, hoc subtus albidum; pedes albidi, antici fulvi-fusco vittati; alæ anticæ nigro maculatæ, posticæ albæ fusco marginatæ.*

Male. Fawn-colour. Proboscis and antennæ tawny. Thorax with a blackish band in front. Pectus testaceous. Abdomen testaceous, whitish beneath. Legs whitish; fore legs tawny, striped with dark brown. Fore wings with diffuse blackish marks, and with three more distinct black discal spots; under side much paler. Hind wings white, with brownish borders. Length of the body 7½ lines; of the wings 18 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 69. PARATHYRIS.

Corpus sat validum. Proboscis non conspicua. Palpi validi, breves, porrecti, pilosi, caput non superantes; articulus 3us minimus. Antennæ thorace non longiores. Abdomen alas posticas triente superans. Pedes validi, pilosi; tibiæ late ciliatæ, posticæ

calcaribus quatuor sat longis. Alæ mediocriter latæ; anticæ maculis exterioribus vitreis, apice truncatæ, margine exteriore angulum perobtusum fingente. *Mas.*—Antennæ mediocriter pectinatæ.

Parathyris, *Hübn. Verz. Schmett.* 158.
Mimallo, p., *Hübn. Verz. Schmett.* 190.
Pygæra, p., *Hübn. Verz. Schmett.* 162.

Body moderately stout. Proboscis obsolete or very short. Palpi porrect, short, stout, pilose, not extending beyond the head; first joint short; third very minute. Antennæ not longer than the thorax. Abdomen oblanceolate, rather long, extending for one-third of its length beyond the hind wings. Legs stout, pilose; tibiæ deeply ciliated, especially the hind pair, which have four moderately long spurs. Wings moderately broad. Fore wings truncated at their tips; the exterior border forming a very obtuse angle at one-third of its length from the costa; hinder part oblique; interior angle oblique, well-defined; three inferior veins; first and second approximate at the base; third remote. *Male.*—Antennæ moderately pectinated.

North America.

1. Parathyris torrefacta.

Mas. *Cana; alæ anticæ ex parte ferrugineæ, gutta subapicali vitrea, fasciis quatuor angustis undulosis maculisque duabus basalibus fuscis; posticæ rufo-ferrugineæ, fascia media margineque interiore albidis, macula una fusca.*

Phalæna torrefacta, *Abbot & Smith, Nat. Hist. Lep. Ins. Georg.* ii. 76.

Pygæra torrefacta, *Hübn. Verz. Schmett.* (*Phalænæ Veræ Melalophæ Certæ*) 162, 1682.

Male. Hoary. Legs partly ferruginous. Fore wings partly ferruginous, with four slender undulating brown bands, and with two contiguous dark brown spots near the base of the interior border; a vitreous dot near each tip; under side with a ferruginous brown apical spot. Hind wings reddish ferruginous, with a whitish middle band; inner border white with a brown spot in the middle; under side with a ferruginous stripe proceeding from the base to the middle, where it joins a ferruginous band.

a, *b*. Georgia. From Mr. Abbot's collection.

South America.

A. Alæ anticæ maculis nonnullis vitreis.
A. Alæ anticæ fuscæ, cervino canoque plagiatæ. Cedo-nulli, *Cram.*
B. Alæ anticæ fuscæ, rufo trifasciatæ. - Pandiona, *Cram.*
C. Alæ anticæ ferrugineæ. - - - - - Satellitia, *Walk.*
D. Alæ anticæ fuscæ, nigro lituratæ. - - - Noëma, *Cram.*
B. Alæ anticæ gutta una vitrea.
A. Alæ anticæ quadrifasciatæ. - - - truncata, *Walk.*
B. Alæ anticæ bifasciatæ. - - - - - microps, *Walk.*
C. Alæ anticæ striga vitrea. - - - - - Ægina, *Cram.*

2. Parathyris Cedo-nulli.

Fœm. *Pallide fusca; abdomen lutescens, vittis lateralibus nigris albo marginatis; alæ anticæ playa maxima postica cervina duabusque anterioribus subhyalinis canescentibus, notisque glaucescentibus albis nigrisque, costa maculisque exterioribus marginalibus albidis; posticæ albidæ, basi venisque pallide luteis.*

Phalæna-Bombyx Cedo-nulli, *Cram. Pap. Exot.* iv. 108, pl. 346, f. A.
Parathyris Cedo-nulli, *Hübn. Verz. Schmett.* 158, 1642.
Surinam.

3. Parathyris Pandiona.

Fœm. *Pallide rufa; abdomen albido-roseum; alæ anticæ fuscæ, strigis tribus obliquis basim versus posticis pallide rufis, maculis nonnullis marginalibus unaque discali albis; posticæ albido-roseæ.*

Phalæna Pandiona, *Cram. Pap. Exot.* iv. 228, pl. 397, f. 1.
Parathyris Pandiona, *Hübn. Verz. Schmett.* 158, 1643.

Female. Pale red. Abdomen whitish rose-colour. Fore wings brown; the basal half with three oblique pale red bands, which do not extend to the costa; a white discal dot near the fore end of the third; some white spots along the exterior border, and a larger one in the disk. Hind wings whitish rose-colour.
Surinam.

4. Parathyris Satellitia.

Mas. *Albida, ferrugineo varia; abdomen fulvum; alæ anticæ ferrugineæ, albido-schistaceo tinctæ, macula clavata discali fusca, maculis tribus lunatis vitreis guttisque tribus luteis submarginalibus; posticæ ferrugineæ.*

Male. Whitish, with some ferruginous hairs. Head and palpi ferruginous, the latter with white tips. Antennæ and abdomen tawny. Posterior legs ferruginous. Fore wings ferruginous, mostly tinged with whitish slate-colour, and with a brown clavate discal spot; tips glaucous, adjoining which hue on the inner side there are three white vitreous lunate spots and three luteous dots, which are partly bordered with brown. Hind wings ferruginous. Length of the body 9 lines; of the wings 22 lines.

a. Rio Janeiro. From Mr. Stevens' collecion.

5. Parathyris Noëma.

Fœm. *Ferrugineo-fusca; abdomen albidum fascia guttisque duabus posticis nigris; alæ anticæ nigro lituratæ et bimaculatæ maculis nonnullis apicibusque albidis, posticæ subcinereæ.*

Phalæna (Bombyx) Noëma, *Cram. Pap. Exot.* i. 27, pl. 18, f. E.

Surinam.

6. Parathyris truncata.

Mas et fœm. *Cervina; abdomen subtus fuscum; alæ anticæ fasciis quatuor testaceis ex parte fusco marginatis, guttaque submarginali limpida; posticæ fuscæ, fascia ciliisque testaceis.*

Male and female. Dull fawn-colour. Abdomen brown beneath. Femora and tibiæ dark brown on the inner side. Fore wings with four testaceous bands; first and second bordered with pale brown on the outer side; first straight, at one-third of the length; second undulating, at beyond the middle; third almost straight, at three-fourths of the length; a pale brown space between it and the fourth, which is very slightly oblique, and has a dark brown spot on its outer side in front of the middle; this spot is accompanied by a small limpid dot. Hind wings brown, with a testaceous fringe and with a testaceous curved middle band, which is most distinct beneath. Length of the body 7½—9 lines; of the wings 15—18 lines.

a, *b*. Rio Janeiro. From Mr. Stevens' collection.

7. Parathyris microps.

Mas. *Cinerea; abdomen cervinum, apice fuscescens, maculis subtus lateralibus albis; alæ anticæ fasciis duabus undulosis guttisque intermediis fuscis, macula subquadrata subapicali vitrea pallide flava; posticæ cervinæ, fascia fusca.*

Male. Cinereous. Antennæ whitish. Abdomen fawn-colour, brownish towards the tip; under side with two lateral rows of white dots. Fore wings with two undulating brown bands, between which there is a row of brown dots; a pale yellow vitreous subquadrate spot on the second band near the tip of the wing; fringe brown. Hind wings fawn-colour, with a brown band; under side ferruginous with a darker band and with brown veins. Length of the body 8 lines; of the wings 16 lines.

a. Brazil. Presented by W. W. Saunders, Esq.

8. Parathyris Ægina.

Mas. *Cervina; alæ fuscæ, luteo fimbriatæ; anticæ strigis transversis obscure fuscis, fasciaque apud marginis exterioris plus dimidium posticum lutea.*

Phalæna-Bombyx Ægina, *Cram. Pap. Exot.* iv. 191, pl. 384, f. D, E. *Oliv. Enc. Méth.* v. 52, 99.
Mimallo Ægina, *Hübn. Verz. Schmett.* 190, 1957.

Male. Fawn-colour. Wings brown, with a luteous fringe. Fore wings with four or five oblique transverse darker brown streaks, and with a luteous stripe which is dilated in front, and extends along more than the hinder half of the exterior border; under side with a blue subapical spot. Hind wings beneath pale testaceous, with two brown bands, and a brown discal ocellus, which, like the inner band, is bordered with white.

Surinam.

Genus 70. ANTICYRA.

Mas et fœm. Corpus sat robustum. Proboscis brevissima. Palpi mediocriter longi, porrecti, pilosissimi, caput superantes; articulus 3us minimus. Abdomen alas posticas paullo superans. Pedes sat validi, longe pilosi; tibiæ posticæ calcaribus quatuor parvis. Alæ anticæ sat longæ et angustæ, apice subacuminatæ, margine exteriore obliquo subconcavo. *Mas.*—Antennæ mediocriter pectinatæ, corporis dimidio æquales. *Fœm.*—Antennæ subpectinatæ, corporis dimidio breviores.

Body moderately stout. Proboscis very short. Palpi moderately long, porrect, very hairy, extending beyond the head; second joint very much longer than the first; third very minute. Abdomen extending a little beyond the hind wings. Legs rather stout, clothed with long hairs; hind tibiæ with four small spurs. Fore wings rather long and narrow, slightly acuminated; exterior border somewhat oblique and slightly concave; three inferior veins; first and second contiguous at the base; third remote. *Male.*—Antennæ moderately pectinated, about half the length of the body; branches stout, very setose. *Female.*—Antennæ subpectinated, less than half the length of the body.

1. ANTICYRA COMBUSTA.

Testacea; caput antice thoracisque latera fulva; abdomen luteum, subtus albidum, maculis lateralibus nigris; alæ anticæ strigis basalibus vitta discali margineque exteriore fuscis.

Testaceous. Head in front and antennæ tawny. Thorax tawny on each side. Abdomen luteous, whitish beneath, with a row of black spots along each side. Fore wings streaked with brown in front at the base, dark brown along the exterior border, whence a brown attenuated stripe proceeds through the disk towards the base. Length of the body 6—7 lines; of the wings 20—22 lines.

a. Philippine Islands. Presented by J. C. Bowring, Esq.
b. New Ireland? Presented by W. Wilson Saunders, Esq.

Genus 71. APELA.

Fœm. Corpus sat robustum. Proboscis longiuscula. Palpi elongati, vix ascendentes; articulus 3us minimus. Antennæ simplices, corporis dimidio æquales. Abdomen alas posticas non superans. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latiusculæ; anticæ apud costam convexæ, margine interiore concavo et fasciculato.

Female. Body moderately stout. Proboscis rather long. Palpi elongate, very slightly ascending; second joint very much longer than the first; third very minute. Antennæ simple, about half the length of the body. Abdomen extending as far as the hind wings. Legs slender; hind tibiæ with four long spurs. Wings rather broad. Fore wings convex along the costa; interior border produced into a fasciculate tooth, concave for a space beyond.

1. APELA DIVISA.

Fœm. *Ferrugineo-fulva, subtus albido-testacea; pedes albido-testacei; alæ anticæ fascia obliqua attenuata fusca, subtus pallide rufescentes.*

Female. Ferruginous-tawny, whitish testaceous beneath. Legs whitish testaceous. Fore wings with a very slender oblique brown band, which extends from the tip to the fasciculated dilatation on the interior border, and is pale along the outer side; under side very pale red, whitish testaceous towards the interior border. Length of the body 6 lines; of the wings 18 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.

Genus 72. ANZABE.

Mas. Corpus robustum. Proboscis brevissima. Palpi caput non superantes? Antennæ mediocriter pectinatæ, thorace longiores. Abdomen alas posticas vix superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longis. Alæ latæ, non longæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore integro vix obliquo, interiore non fasciculato.

Male. Allied to the *Noctuites*. Body stout. Proboscis extremely short. Palpi (mutilated in the specimen described) not extending beyond the head? Antennæ moderately pectinated, a little longer than the thorax. Abdomen extending very little beyond the hind wings. Legs stout, pilose; hind tibiæ with four long spurs. Wings broad, not long. Fore wings straight along the costa, rounded at the tips, not denticulated and hardly oblique along the exterior border; interior angle rounded; interior border not indented nor tufted; first and second inferior veins nearly contiguous at the base; third about twice further from the fourth than from the second.

1. ANZABE SINENSIS.

Mas. *Cinereo-cervina; tibiæ anticæ apice albæ; alæ anticæ macula discali nigra fasciisque duabus angustis obliquis fuscescentibus.*

Male. Cinereous fawn-colour. Antennæ about half the length of the body. Fore tibiæ with white tips. Fore wings with a blackish discal spot between two slender oblique brownish bands;

space inclosed by the latter rather paler than the wing elsewhere; inner band undulating; outer one almost straight. Length of the body 7 lines; of the wings 16 lines.

a. Hong Kong. Presented by Colonel Champion.

Genus 73. ALPIS.

Corpus robustum, dense lanuginosum. Palpi obsoleti? Antennæ breves. Abdomen alas posticas paullo superans. Alæ sat angustæ. *Mas.*—Antennæ late pectinatæ. Abdomen apice pilis longis vestitum. Pedes late ciliati. *Fœm.*—Antennæ simplices. Abdomen apice densissime lanuginosum. Tarsi apice subincrassati.

Body stout, thickly clothed with woolly hairs. Palpi obsolete? Abdomen extending a little beyond the hind wings. Wings rather narrow. Fore wings somewhat elongated towards their tips, especially in the female. *Male.*—Antennæ deeply pectinated, full one-fourth of the length of the body. Abdomen thickly clothed with long hairs at the tip. Legs ciliated with long hairs. *Female.*—Antennæ simple, about one-third of the length of the body. Abdomen very thickly lanuginose at the tip. Tarsi somewhat incrassated towards the tips.

NOTE.—This genus seems to connect the *Notodontidæ* with the *Limacodidæ*.

1. ALPIS DEFOLIATA.

Fulva; caput et thorax antice albida; abdomen testaceum; alæ cervinæ; anticæ dense lanuginosæ, ex parte pallide fuscæ nigroque strigatæ, vitta basali fasciaque undulosa obliqua maculaque discali albidis.

Tawny. Head and fore border of the thorax whitish. Abdomen testaceous. Wings fawn-colour. Fore wings mostly thickly clothed with crispy woolly hairs, pale brown and streaked with black, with the exception of a very broad stripe along the exterior and interior borders; a broad short whitish stripe at the base; an undulating oblique whitish band separating the brown from the fawn-coloured part, and a whitish discal spot in the brown part; second inferior vein about twice further from the third than from the second; third further from the fourth than from the second. *Male.*—Thorax with whitish spots. Length of the body 9 lines; of the wings 20 lines. *Female.*—Hairs of the thorax mostly vertical. Length of the body 10 lines; of the wings 28 lines.

a. Mexico. Presented by E. Doubleday, Esq.
b. Mexico. From Mr. Argent's collection.

2. ALPIS XANTHOPASA.

Fœm. *Ferruginea; caput supra et abdomen apice testacea; alæ anticæ fuscescentes, basi ferrugineæ, macula discali fasciaque obliqua diffusa albidis; posticæ cinereæ, ciliis obscurioribus.*

Phalæna-Bombyx xanthopasa, *Anon. Ins. Surin.* i. 35, pl. 14.

Surinam.

Female. Ferruginous. Head above and abdomen at the tip testaceous. Antennæ whitish. Fore wings mostly brownish, ferruginous towards the base, with a whitish discal spot, and with an oblique diffuse whitish band near and parallel to the exterior border; second inferior vein about six times further from the third than from the first; third nearer to the fourth than to the second. Hind wings grayish, with darker ciliæ. Length of the body 9 lines; of the wings 28 lines.

a. South America. From Mr. Argent's collection.

Genus 74. INÖUS.

Mas. Corpus robustum, breve, densissime pilosum. Palpi porrecti, pilosissimi, caput non superantes; articulus 3us minimus. Antennæ subpectinatæ, corporis dimidio paullo longiores. Abdomen alas posticas non superans. Pedes ciliati, sat validi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ non longæ; anticæ sat angustæ.

Male. Allied to the *Limacodidæ*. Body stout, short, very thickly clothed with hairs. Palpi porrect, very pilose, not extending beyond the head; third joint very small. Antennæ slightly pectinated, rather more than half the length of the body. Abdomen not extending beyond the hind wings. Legs rather stout, ciliated; hind tibiæ with minute apical spurs. Wings not long. Fore wings rather narrow; second inferior vein almost as near to the third as to the first; third a little further from the fourth than from the second.

1. INÖUS NIGRIPALPIS.

Mas. *Rufescens; palpi nigri; thoracis latera postica et ebdomen fulva; tarsi nigro fasciati; pedes antici nigricantes; alæ anticæ maculis tribus angulosis albis; posticæ pallidiores.*

Male. Reddish. Palpi black. Thorax on each side hindward and abdomen tawny. Tarsi with black bands; fore legs mostly blackish. Fore wings with three angular white spots; one by the interior border near the base; the second in the disk; the third by the costa, beyond two-thirds of the length. Hind wings paler than the fore wings, pale testaceous towards the base. Length of the body 5 lines; of the wings 12 lines.

a. South Africa. From Mr. Pamplin's collection.

Genus 75. ZAGARIS.

Mas. Corpus robustum, pilis longiusculis dense vestitum. Proboscis brevissima. Palpi validi, porrecti, pilosi, caput paullo superantes; articulus 3us minutus, obtusus. Antennæ late pectinatæ. Abdomen alas posticas dimidio superans. Pedes validi; tibiæ posticæ calcaribus duobus apicalibus sat longis. Alæ angustæ.

Zagaris, *MSS.*

Automolis, p., *Hübn. Verz. Schmett.* 170.

Male. Body stout, thickly clothed with rather long hairs. Proboscis very short. Palpi porrect, stout, pilose, moderately long, extending a little beyond the head; second joint much longer than the first; third minute, obtuse. Antennæ deeply pectinated. Abdomen extending for half its length beyond the hind wings. Legs stout; hind tibiæ with stout moderately long apical spurs. Wings narrow. Fore wings with the first and second inferior veins united at the base; third much nearer to the second than to the fourth.

1. ZAGARIS METEUS.

Mas. *Fulva; abdomen et alæ thorace pallidiora.*

Phalæna-Bombyx Meteus, *Cram. Pap. Exot.* iv. pl. 347, f. B.

Automolis Meteus, *Hübn. Verz. Schmett.* 171, 1758.

Male. Tawny. Abdomen and wings rather paler than the thorax. Length of the body 7—8 lines; of the wings 16—18 lines.

a—d. Cape. From M. Dregé's collection.

Genus 76. PTILOPHORA.

Corpus pilosum, sat validum. Caput antice pilosissimum. Proboscis brevissima. Palpi minimi. Antennæ corporis dimidio longiores. Abdomen cristatum, alas posticas vix superans. Pedes graciles; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo subconvexo. *Mas.*—Antennæ latissime plumosæ. *Fœm.*—Antennæ simplices, graciles.

Ptilophora, *Steph. Ill. Brit. Ent. Haust.* ii. 29.
Bombyx, p., *Fabr. Wien. Verz.; Hübn.; God.; Herr.-Schæff.*
Notodonta, p., *Ochs.; Boisd.; Duponch.*
Odontosia, p., *Hübn.*

Body pilose, moderately stout. Head very pilose in front. Proboscis very short. Palpi very small. Antennæ more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs slender; hind tibiæ with two minute apical spurs. Wings moderately broad. Fore wings straight along the costa, rounded at the tips, oblique and slightly convex along the exterior border; interior angle much rounded; discal areolet intersected by a fold or secondary vein; three inferior veins; second about twice further from the third than from the first. *Male.*—Antennæ extremely deeply pectinated. *Female.*—Antennæ slender, simple.

1. PTILOPHORA VARIEGATA.

Alæ ochraceo-ferrugineæ, striga arcuata flavescente.

Ptilophora variegata, *Steph. Ill. Brit. Ent. Haust.* ii. 29, 1, pl. 14, f. 1.

Bombyx plumigera, *Wien. Verz.* 61. *Fam.* P. 2. *Fabr. Mant. Ins.* ii. 127, 154. *Ent. Syst.* iii. 462, 174. *Gmel. ed. Syst. Nat.* i. 5, 24, 25, 537. *Illig. N. Ausg. dess.* i. 136, 2: *Mag.* ii. 63, 2. *Esp. Schmett.* iii. 254, pl. 50, f. 6, 7. *Schwarz, Beytr.* 85, pl. 13, f. 1—10. *Fuessl. A. Mag.* ii. 1, 104; *N. Mag.* ii. 377. *Borkh. Eur. Schmett.* iii. 445, 171. *Vieweg, Tab. Verz.* i. 48, 36. *Oliv. Enc. Méth.* v. 84, 204. *Hübn. Bomb.* 105, 8, pl. 4, f. 13; pl. 58, f. 250; *Lurv. Lep.* iii. *Bomb.* i. *Sphing.* C. b. c, f. 1. *God. Lép. de France*, iv. 205.
——— ———, *Pap. d'Eur.* v. 91, pl. 195, f. 257. *Naturf.* iii. 3, pl. 1, f. 2.

Bombyx variegata, *De Vill. Ent. Linn.* ii. 160, 85.
Notodonta plumigera, *Ochs. Schmett. von Eur.* iii. 71, 12. *Duponch. Suppl. God. Lép. France, Pseudo-bombycites*, pl. 5, f. 2. *Boisd.*
Ptilophora plumigera, *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 121, 17, 1.
Odontosia plumigera, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Ptilodontes Odontosiæ*), 146, 1540.

a—d. England. From Mr. Stephens' collection.
e—g. England.
h—k. Europe. From M. Becker's collection.

Genus 77. PTILOMACRA.

Mas. Corpus robustum. Caput et thorax pilosissima. Caput parvum. Proboscis non conspicua. Palpi breviusculi, porrecti, caput non superantes; articulus 3us parvus, conicus. Antennæ latissime plumosæ, corpore paullo breviores. Abdomen alas posticas non superans. Pedes validi; tibiæ posticæ calcaribus minutis apicalibus. Alæ longiusculæ, sat latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subobliquo.

Male. Body stout. Head and thorax very pilose. Head small. Proboscis not visible. Palpi rather short, porrect, not extending beyond the body; third joint small, conical. Antennæ extremely deeply plumose, full three-fourths of the length of the body. Abdomen extending as far as the hind wings. Legs stout; hind tibiæ with minute apical spurs. Wings rather long, moderately broad. Fore wings straight along the costa, rounded at the tips, slightly oblique along the exterior border; interior angle much rounded; discal areolet intersected by two veins; second inferior vein as near to the third as to the first; third rather further from the fourth than from the second.

1. PTILOMACRA SENEX.

Mas. *Nigro-fusca; thorax albido bimaculatus; alæ anticæ albido conspersæ; abdomen et alæ posticæ fusca.*

Male. Blackisk brown. Thorax with two elongated whitish spots. Fore wings sprinkled with whitish plumes, brown beneath. Abdomen and hind wings brown. Length of the body 10 lines; of the wings 26 lines.

a. New Holland. From Mr. Argent's collection.
b. New South Wales. From Mr. Stevens' collection.
c. New South Wales. From Mr. Milne's collection.

2. PTILOMACRA JUVENIS.

Mas. *Cervina; alæ anticæ vittis tribus guttaque discali fuscis.*

Male. Fawn-colour. Fore wings sprinkled with brown plumes; discal dot brown; three brown stripes not extending along the whole length of the wing; first stripe by the costa; second in the disk; third along the interior border. Length of the body 6 lines; of the wings 16 lines.

a. Ceylon. Presented by R. Templeton, Esq.

Genus 78. CLAMARA.

Fœm. Corpus sat validum, pilis longiusculis vestitum. Proboscis non conspicua. Palpi brevissimi, pilosi. Antennæ subpectinatæ, thorace breviores. Abdomen apice sublanuginosum, alas posticas non superans. Pedes usque ad tarsorum apices pilis longis vestiti. Alæ longiusculæ, pilosæ, sat angustæ, vix semihyalinæ; anticæ apud costam subconvexæ, apice rotundatæ, margine exteriore perobliquo.

Female. Body moderately stout, clothed with rather long hairs. Proboscis obsolete? Palpi pilose, very short. Antennæ minutely pectinated, shorter than the thorax. Abdomen rather lanuginose at the tip, extending as far as the hind wings. Legs, including the tarsi, clothed with long hairs. Wings pilose, rather long and narrow, hardly semihyaline. Fore wings slightly convex along the costa, rounded at the tips, very oblique along the exterior border; first and second interior veins contiguous at the base; third a little nearer to the second than the fourth.

1. CLAMARA TERMINATA.

Fœm. *Nigra; abdomen apicem versus cervinum; alæ triente apicali cervinæ, anticæ macula subapicali nigra albido marginata.*

Female. Black. Abdomen dull fawn-colour towards the tip. Wings fawn-colour along the exterior border and for one-third of the length from the tips. Fore wings with a black whitish-bordered spot near each tip; the outer line of the black part partly whitish. Length of the body 6—7 lines; of the wings 16—18 lines.

Rio Janeiro. In Mr. Fry's collection.

ADDENDA TO THE NOTODONTIDÆ.

Genus LOBEZA.

Mas. Corpus robustum. Proboscis capitis latitudine brevior. Palpi validi, porrecti, pilosi, caput non superantes; articulus 3us minutus, conicus. Antennæ subpectinatæ, corporis dimidio æquales. Abdomen alas posticas triente superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor sat longis. Alæ longiusculæ, sat latæ, anticæ apud costæ dimidium apicale subconvexæ, apice subangulatæ, margine exteriore valde obliquo, interiore integro non fasciculato.

Lobeza, *Boisd. Herr.-Schæff. Lép. Exot. Sp. Sér.* i.

Female. Body stout. Proboscis somewhat shorter than the breadth of the head. Palpi stout, porrect, pilose, not extending beyond the head; third joint minute, conical. Antennæ slightly pectinated, about half the length of the body. Abdomen extending for one-third of its length beyond the hind wings. Legs stout, pilose; hind tibiæ with four moderately long spurs. Wings rather long, moderately broad. Fore wings very slightly convex along the apical half of the costa, forming a slightly obtuse angle at each tip, very oblique along the exterior border; interior angle very obtuse; interior border not indented nor tufted; three inferior veins; second about thrice further from the third than from the first.

1. Lobeza Aglone.

Fœm. *Alba; caput subtus fuscum; palpi fusci, apice albi; thorax et alæ anticæ fusco conspersa; abdomen pallide cervinum, vitta interrupta dorsali apiceque albis; alæ anticæ luteo bifasciatæ, posticæ cinereo obsolete bifasciatæ.*

Lobeza Aglone, *Boisd. Herr.-Schæff. Lép. Exot. Sp. Sér.* i. pl. 18, f. 85.

Female. White. Head brown beneath. Palpi brown, with white tips. Antennæ tawny. Thorax and fore wings with many brown plumes. Abdomen pale fawn-colour, with an interrupted white dorsal stripe and a white tip. Fore wings with two slight luteous bands, the outer one much more oblique and angular than the inner one. Hind wings with two very indistinct grayish discal bands. Length of the body 15 lines; of the wings 42 lines.

a. Rio Janeiro. From Mr. Stevens' collection.

Genus IANASSA.

Mas. Corpus sat robustum. Proboscis capitis latitudine vix brevior. Palpi pilosi, subascendentes, caput vix superantes; articulus 3us obtusus, minimus. Antennæ mediocriter pectinatæ, apices versus nudæ, corporis dimidio multo longiores. Abdomen alas posticas triente superans. Pedes pilosi, sat graciles; tibiæ posticæ calcaribus quatuor longiusculis. Alæ anticæ perangustæ, apud costam rectæ, apice acuminatæ, margine exteriore perobliquo, interiore fasciculato.

Male. Body moderately stout. Proboscis nearly as long as the breadth of the head. Palpi pilose, very slightly ascending, hardly extending beyond the head; third joint obtuse, very small. Antennæ much more than half the length of the body, moderately pectinated to about three-fifths of the length. Abdomen extending for about one-third of its length beyond the hind wings. Legs pilose, rather slender; hind tibiæ with four rather long spurs. Fore wings very narrow, straight along the costa, acuminated at the tips, extremely oblique along the exterior border; interior angle very obtuse; interior border tufted before half its length; three inferior veins; first and second nearly contiguous at the base; third remote.

1. IANASSA LIGNICOLOR.

Mas. *Pallide cinerea; antennæ fulvæ; alæ anticæ strigis nonnullis fuscis, apud discum ex parte albæ.*

Male. Pale cinereous. Antennæ tawny. Fore wings with *some brown streaks, partly white in the disk; tuft of the interior order dark brown. Hind wings white, with a dark brown mark by* ie interior angle. *Length of the body 8 lines; of the wings 18* nes.

———? From Mr. Milne's collection.

Fam. 6. LIMACODIDÆ.

Corpus plus minusve crassum. Proboscis sæpissime non conspicua. Palpi sæpissime breves, nonnunquam elongati. Antennæ capitis latitudine multo longiores. Thorax non cristatus. Abdomen alas posticas rarissime superans. Pedes sæpissime validi. Alæ breviusculæ, rotundatæ, sat latæ; anticæ vena marginis interioris unica, aliter venosæ et infrenatæ, necnon majoris ac posteriores; posticæ vena 1o marginis interioris medium vix superans. Frenulum conspicuum.

"Larvæ singulares, depressæ, abbreviatæ, limaciformes, scutelliformes, vel testudiniformes, vix alias erucas referentes, muticæ vel lateraliter appendiculatæ, glabræ vel subpilosulæ."—*Boisd.*

Limacodidæ, *Duponch. Cat. Méth. Lép.* 84.
Limacodidi, *Steph. Cat. Brit. Lep.* 57.
Cocliopodes, *Boisd. Gen. et Ind. Méth.* 81.

This family is connected by various links with the *Bombycidæ* and the *Drepanulidæ*, and also approaches the *Arctiidæ* and the *Zygænidæ*, which families are nearly allied to each other and to the *Lithosiidæ*.

Synopsis of Genera.

A. Palpi clavati. - - - - - - 1. SCOPELODES.
B. Palpi non clavati.
  A. Antennæ *maris* apice fasciculatæ. - - 2. DALCERA.
  B. Antennæ *maris* non fasciculatæ.
    a. Palpi caput superantes.
      a. Palpi longissimi. - - - - - 6. MONEMA.
      b. Palpi non longissimi.
        i. Antennæ *maris* pectinatæ.
          * Antennæ basi late aut mediocriter pectinatæ.
            † Corpus robustum.
              ‡ Tibiæ bispinosæ.
                § Alæ anticæ apud marginem exteriorem obliquæ.
                  × Alæ apice vix rotundatæ.
                    0 Alæ posticæ abdomen non superantes. 23. NYSSIA.
                    00 Alæ posticæ abdomen superantes. 14. TALIMA.
                  ×× Alæ apice valde rotundatæ. - 24. NEÆRA.

§§ Alæ anticæ apud marginem exteriorem non obliquæ. - - - 7. COSUMA.
‡‡ Tibiæ quadrispinosæ.
§ Alæ anticæ falcatæ. - - 31. PAMEA.
§§ Alæ anticæ non falcatæ.
× Palporum articulus 3us obtusus.
0 Tibiæ posticæ calcaribus sat longis. 4. NATADA.
00 Tibiæ posticæ calcaribus parvis. 5. AMYDONA.
×× Palporum articulus 3us acutus.
0 Antennæ *maris* totæ pectinatæ. 26. SURIDA.
00 Antennæ *maris* vix dimidio basali pectinatæ. - - 25. EUCLEA.
†† Corpus vix robustum.
‡ Antennæ *maris* late pectinatæ. - 8. SUSICA.
‡‡ Antennæ *maris* breviter pectinatæ. 29. NESARA.
††† Corpus gracillimum. - - - 32. NIACA.
** Antennæ basi subpectinatæ. - - 22. SEMYRA.
ii. Antennæ *maris* subpectinatæ. - 3. MESSATA.
iii. Antennæ *maris* simplices.
* Pedes ciliati.
† Alæ anticæ margine exteriore convexo. 28. NAROSA.
†† Alæ anticæ margine exteriore non convexo. 21. METRAGA.
** Pedes non ciliati. - - - 27. LIMACODES.

B. Palpi caput vix superantes.
a. Antennæ corporis dimidio longiores. - 13. PELORA.
b. Antennæ corporis dimidio non longiores. - 33. MAREDA.

C. Palpi caput non superantes.
a. Abdomen alas posticas non superans.
i. Antennæ corporis dimidio longiores.
* Antennæ *maris* basi pectinatæ. Abdomen *fœminæ* dense lanuginosum. - - 11. DORATIFERA.
** Antennæ *maris* totæ pectinatæ. Abdomen *fœminæ* non lanuginosum. - - - 15. MECYTHA.
ii. Antennæ corporis dimidio non longiores.
* Alæ anticæ apice subangulatæ. - 30. NAPREPA.
** Alæ anticæ apice rotundatæ.
† Palpi non brevissimi.
‡ Palporum articulus 3us brevissimus. 16. MIRESA.

‡ Palporum articulus 3us sat longus.
§ Corpus sat validum. - - 17. SOMARA.
§§ Corpus sat gracile. - - 18. CAMILA.
†† Palpi brevissimi. - - - 20. AGISA.
b. Abdomen alas posticas superans.
i. Pedes validi.
* Antennæ *maris* late pectinatæ.
† Alæ breviusculæ. - - - 19. PERNA.
†† Alæ sat longæ. - - - - 9. ROMOSA.
** Antennæ *maris* latissime pectinatæ. - 10. LARUMA.
ii. Pedes graciles. - - - - 12. ANAPÆA.

Genus 1. SCOPELODES.

Corpus robustum. Proboscis non conspicua. Palpi longissimi, porrecti, pilosi, thorace vix breviores; articulus 1us subarcuatus; 2us 1o multo longior; 3us 1o vix brevior, apice fasciculatus. Antennæ simplices, graciles, corporis dimidio non longiores. Pedes validi, pilosi, ex parte ciliati; tarsi ciliati apice subincrassati; tibiæ posticæ calcaribus quatuor longiusculis. Alæ latissimæ; anticæ apice rotundatæ, posticæ abdomen longe superantes.

Scopelodes, *Westw. Duncan, Nat. Libr.* xxxvii. 222.

Body stout. Proboscis not visible. Palpi porrect, pilose, very long, hardly shorter than the thorax; second joint much longer than the first, which is slightly curved; third nearly as long as the first, somewhat tufted at the tip. Antennæ simple, slender, about half the length of the body. Abdomen extending not near as far as the hind wings. Legs stout, pilose, partly ciliated; tarsi ciliated, somewhat incrassated towards the tips; hind tibiæ with four rather long spurs. Wings very broad. Fore wings with the tips and the interior angle rounded; second inferior vein twice further from the third than from the first; third somewhat further from the fourth than from the second.

1. SCOPELODES UNICOLOR.

Cervina; abdomen apice nigrum, vitta ventrali testacea nigro marginata; tarsi apice nigri; alæ nitentes. Mas.—*Palpi nigro hirti, fascia subapicali alba.*

Scopelodes unicolor, *Westw. Dunc. Nat. Libr.* xxxvii. 222.

Fawn-colour. Abdomen black at the tip; under side with a testaceous stripe, which is bordered with black on each side. Tarsi

with black tips. Wings shining. *Male.*—Palpi mostly clothed with black hairs, with a white subapical band. Length of the body 9—10 lines; of the wings 29—32 lines.

Var. β. *Male.* Abdomen with black dorsal tufts.

Var. γ. *Male.* Brown. Fore wings with a broad diffuse slightly paler band. Hind wings fawn-colour, their borders brown, excepting the veins.

a, *b*. Silhet. Presented by E. Doubleday, Esq.
c. East Indies. From Archdeacon Clerk's collection.
d. Ceylon. Presented by R. Templeton, Esq.

2. SCOPELODES PALPALIS.

Fœm. *Ferruginea; antennæ albidæ; abdomen albidum vitta interrupta dorsali apiceque nigris; pedes ex parte testaceo hirti; alæ anticæ subtus posticæque totæ albidæ.*

Female. Ferruginous. Antennæ whitish. Abdomen, fore wings beneath and hind wings whitish. Abdomen with an interrupted black dorsal stripe, and with a black tip. Legs partly clothed with pale testaceous hairs. Wings with a pale testaceous cilia. Length of the body 9 lines; of the wings 25 lines.

a. Java. From the East India Company's collection.

3. SCOPELODES VENOSA.

Mas. *Nigro-fusca; palpi subtus ferruginei, fascia subapicali alba; abdomen luteum, fasciis dorsalibus apiceque nigris; pedes albo hirti; alæ anticæ subtus posticæque pallide testaceæ, posticæ basi luteæ.*

Male. Blackish brown. Palpi ferruginous beneath, with a white subapical band. Abdomen luteous, with short black dorsal bands and a black tip; under side with a whitish stripe, which has a black interrupted stripe on each side. Legs partly clothed with white hairs. Fore wings beneath and hind wings pale testaceous. Hind wings pale luteous towards the base. Length of the body 10 lines; of the wings 26 lines.

a. Silhet. From the Rev. J. Stainforth's collection.

4. SCOPELODES CONTRACTA.

Mas. *Fusca, subtus pallidior; palpi nigricantes, fascia subapicali albida; abdomen supra ferrugineo-fuscum, vitta nigricante, subtus vitta albida; alæ anticæ venis testaceis.*

Male. Brown, paler beneath. Palpi blackish, with a whitish subapical band. Antennæ whitish. Abdomen ferruginous-brown above, with a blackish stripe; under side with a whitish stripe. Fore wings with some whitish hairs along the costa; veins somewhat testaceous. Length of the body 6 lines; of the wings 14 lines.

a. North China. From Mr. Cuming's collection.

Genus 2. DALCERA.

Mas. Corpus gracile. Proboscis non conspicua. Palpi graciles, caput vix superantes; articulus 3us parvus, acuminatus. Antennæ filiformes, plus minusve pectinatæ. Pedes graciles. Alæ latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore sat obliquo; posticæ abdomen superantes.

Dalcera, *Herr.-Schæff. Lép. Exot. Sp. Sér.* 1.

Male. Body slender. Proboscis obsolete? Palpi slender, hardly extending beyond the head; second joint much longer than the first; third small, acuminated. Abdomen not extending so far as the hind wings. Legs slender. Wings broad. Fore wings convex in front, rounded at the tips, rather oblique along the exterior border; three inferior veins; second as far from the first as from the third.

1. Dalcera abrasa.

Mas. *Lutea; antennæ nigræ, mediocriter pectinatæ, apice subfasciculatæ; thorax antice pallide flavus, maculis duabus lateralibus fuscis; alæ anticæ testaceæ, apud costam pallide flavæ, litura obliqua, vitta discali margineque exteriore fuscis.*

Dalcera abrasa, *Herr.-Schæff. Lép. Exot. Sp. Sér.* 1, f. 180.

Colombia.

Male. Luteous. Antennæ black, moderately pectinated, slightly tufted at the tips. Thorax pale yellow in front; on each side a brown spot which joins the stripe on each fore wing. Tarsi with black tips. Fore legs partly black. Fore wings testaceous, pale yellow along the costa; a small oblique discal mark; a middle stripe and the exterior border brown. Length of the body 5—6 lines; of the wings 14—16 lines.

a. Santarem. From Mr. Bates' collection.
b. ———?

2. DALCERA FLAVA.

Mas. *Aureo-viridis; antennæ mediocriter pectinatæ, apice subfasciculatæ.*

Male. Golden yellow. Antennæ moderately pectinated, slightly tufted at the tips. Length of the body 4 lines; of the wings 10 lines.

Rio Janeiro. In Mr. Fry's collection.

3. DALCERA OCHRACEA.

Mas. *Lutea; antennæ subpectinatæ, thorace non longiores.*

Male. Luteous. Antennæ minutely pectinated, not longer than the thorax. Length of the body 4 lines; of the wings 12 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 3. MESSATA.

Mas. Corpus sat robustum. Caput et thorax longe pilosa. Proboscis non conspicua. Palpi pilosi, brevissimi. Antennæ subsetaceæ, subpectinatæ, thorace vix longiores. Pedes validi, pilosi; tibiæ posticæ calcaribus duobus apicalibus sat longis. Alæ latissimæ; anticæ apud costam pilosæ vix convexæ, apice subangulatæ, margine exteriore obliquo subconvexo, angulo interiore distincto obtuso.

Male. Body moderately stout. Head and thorax with long hairs. Palpi pilose, very short. Antennæ minutely pectinated, slightly setaceous, very little longer than the thorax. Abdomen extending very nearly as far as the hind wings. Legs stout, pilose; hind tibiæ with two moderately long apical spurs. Wings very broad. Fore wings pilose and very slightly convex along the costa, slightly angular at the tips, oblique and very slightly convex along the exterior border; interior angle distinct, obtuse; discal areolet intersected by a secondary vein; three inferior veins; second about thrice further from the third than from the first.

1. MESSATA RUBIGINOSA.

Mas. *Ferruginea; antennæ fulvæ; abdomen testaceum; alæ anticæ vix purpurascentes, fasciis duabus angustis obliquis subobsoletis nigricantibus.*

Male. Ferruginous, rather paler beneath. Antennæ tawny. Abdomen testaceous. Fore wings with a very slight purplish tinge, and with two slender oblique indistinct blackish bands. Length of the body 11 lines; of the wings 28 lines.

a. Ceylon. From Mr. Cuming's collection.

2. MESSATA LINEATA.

Mas. *Testacea; caput, antennæ et pedes pallide lutea; antennæ subpectinatæ; alæ vitta exteriore gracili obliqua subundulosa fusca; anticæ basi dense pilosæ.*

Male. Testaceous. Head, antennæ and legs pale luteous. Antennæ very minutely pectinated. Fore wings rather thickly pilose towards the base and on the basal part of the costa, with a slender oblique hardly undulating brown stripe a little beyond three-fourths of the length. Hind wings with a similar band, which is more directly transversal, and its fore end is some space beyond the hind end of the fore band. Length of the body 8 lines; of the wings 26 lines.

a. North India. From Mr. Stevens' collection.

Genus 4. NATADA.

Mas. Corpus pilosum, sat robustum. Palpi mediocres aut longi, porrecti, validi, subtus pilosissimi, caput plus minusve superantes; articulus 3us brevis, obtusus. Antennæ mediocriter pectinatæ, corporis dimidio non longiores. Abdomen alas posticas non superans, apice subfasciculatum. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor mediocriter longis. Alæ latæ; anticæ apud costam rectæ, margine exteriore vix obliquo.

Male. Body pilose, rather stout. Palpi porrect, stout, more or less long, very pilose beneath, extending rather far or very little beyond the head; second joint very much longer than the first; third short, obtuse. Antennæ moderately pectinated, about half the length of the body; the branches gradually decreasing in length. Abdomen extending as far as the hind wings, somewhat tufted at

the tip. Legs stout, pilose; hind tibiæ with four moderately long spurs. Wings broad. Fore wings straight along the costa, oblique or hardly oblique along the exterior border; first and second inferior veins contiguous at the base; third much nearer to the second than to the fourth.

The three species of *Natada* differ in structure, and may constitute as many genera.

A. Alæ anticæ margine exteriore vix obliquo. - rufescens, *Walk.*
B. Alæ anticæ margine exteriore obliquo.
A. Palpi caput longe superantes. - - - rugosa, *Walk.*
B. Palpi caput vix superantes. - - - basalis, *Walk.*

1. NATADA RUFESCENS.

Mas. *Fusca; thorax rufus, fusco varius; pectus fulvum; abdomen vitta dorsali rufa; alæ ferrugineæ, anticæ fasciis tribus angustis nigricantibus.*

Male. Brown. Thorax red, brown in front and partly so on each side. Pectus tawny. Abdomen with a red dorsal stripe. Femora with somewhat tawny hairs. Wings ferruginous. Fore wings with three slender blackish bands; first band straight, slightly oblique, at one-third of the length of the wing; second deeply angular, with two blackish dots between it and the first; third straight, upright, near the tip of the wing. Hind wings a little paler than the fore wings. Length of the body 6 lines; of the wings 14 lines.

a, *b*. North India. From Mr. L. James' collection.

2. NATADA RUGOSA.

Mas. *Ferruginea; alæ anticæ obscure fuscæ, nitentes, rugosæ; posticæ pallidiores.*

Male. Ferruginous. Fore wings dark brown, glistening, with a ridge which extends from one-third of the length of the interior border to five-sixths of the length of the costa, near which it is curved; another slender exterior and slightly curved ridge nearly joins the first by the costa, and does not extend to the interior border. Hind wings paler brown. Length of the body 10 lines; of the wings 22 lines.

a. Scinde? From Mr. Warwick's collection.

3. Natada basalis.

Mas. *Cervina; alæ anticæ basi fuscæ, fascia obliqua nigricante, linea fasciaque exterioribus albidis.*

Male. Fawn-colour. Fore wings brown for near one-third of the length from the base; the brown part bounded exteriorly by an oblique blackish band, which is accompanied by a whitish line on its outer side; a slight whitish band by the exterior border. Length of the body 4½ lines; of the wings 11 lines.

East Indies. In Mr. Saunders' collection.

Genus 5. AMYDONA.

Mas. Corpus robustum, pilosum. Proboscis non conspicua. Palpi validi, porrecti, pilosi, vix arcuati, caput vix superantes; articulus 3us minutus, conicus. Antennæ sat late pectinatæ, thorace non longiores. Abdomen alas posticas non aut vix superans. Pedes validi; femora et tibiæ late ciliata; tibiæ posticæ calcaribus quatuor parvis. Alæ latæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore obliquo.

Male. Body stout, pilose. Proboscis obsolete or very short. Palpi stout, porrect, pilose, very slightly curved, extending very little beyond the head; first joint short; third minute, conical. Antennæ rather deeply pectinated, not longer than the thorax. Abdomen extending as far as the hind wings, or a little beyond them. Legs stout; femora and tibiæ deeply ciliated; hind tibiæ with four small spurs. Wings broad. Fore wings almost straight along the costa, more or less rounded at the tips, more or less oblique along the exterior border; three inferior veins; first and second contiguous at the base; third rather remote.

1. Amydona subpunctata.

Mas. *Ferruginea; palpi nigri, apice albidi; thorax antice testaceus; pedes testacei, femoribus tibiisque extus ferrugineis; alæ anticæ subpurpurascentes, apice subangulatæ, guttis tribus nigris, margine exteriore vix obliquo; posticæ testaceæ.*

Male. Ferruginous. Antennæ pale testaceous. Palpi black, with whitish tips. Thorax in front and pectus mostly pale testaceous. Legs pale testaceous; femora and tibiæ with some black hairs, ferruginous on the outer side. Fore wings shining, with a slight pale purplish gloss, almost angular at the tips, very slightly

oblique along the exterior border; a black dot near the costa at one-fifth of the length, and two black dots in a transverse line near the exterior border and behind the middle of the latter. Hind wings testaceous. Length of the body 6½ lines; of the wings 13 lines.

Rio Janeiro. In Mr. Fry's collection.

2. AMYDONA LUCENS.

Mas. *Ferruginea; antennæ testaceæ, mediocriter pectinatæ; pedes ex parte albido hirti; alæ anticæ albicantes, apud costam nigro conspersæ; posticæ pallide fuscæ, apud marginem interiorem albidæ.*

Male. Ferruginous. Antennæ testaceous, moderately pectinated. Pectus mostly testaceous. Legs partly clothed with whitish hairs. Fore wings with a whitish gloss, rounded at the tips, with some minute black flecks along the costa; exterior border oblique. Hind wings pale brown, whitish along the interior border; under side whitish, with minute black flecks about the borders. Length of the body 6½ lines; of the wings 13 lines.

Rio Janeiro. In Mr. Fry's collection.

3. AMYDONA PUNCTATA.

Mas. *Pallide ferruginea; antennæ mediocriter pectinatæ; alæ anticæ pallide fuscæ, fascia lata obliqua obscure fusca fasciisque nonnullis obliquis angustis angulosis albidis, guttisque exterioribus nigricantibus.*

Male. Pale ferruginous. Antennæ testaceous, moderately pectinated. Fore wings pale brown, narrower than those of the two preceding species, more rounded at the tips and more oblique along the exterior border than in *A. lucens;* a broad oblique darker brown band near the middle, and on each side of it some whitish oblique slender zigzag bands; a deep black spot on the discal areolet, and a blackish oblique mark near the tip of the costa; also a line of black dots near and parallel to the exterior border. Length of the body 5 lines; of the wings 11 lines.

Var. β. Discal black spot very small; zigzag bands indistinct.

Rio Janeiro. In Mr. Fry's collection.

Genus 6. MONEMA.

Fœm. Corpus robustum. Proboscis non conspicua. Palpi graciles, longissimi; articulus 3us 1o paullo longior. Antennæ simplices, thoracis longitudine. Pedes validi; tibiæ posticæ calcaribus quatuor sat longis. Alæ latiusculæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore subobliquo et subconvexo; posticæ abdomen superantes.

Male. Body stout. Proboscis very short or none. Palpi slender, extremely long, more than thrice the length of the head; second joint about twice the length of the first; third rather longer than the first. Antennæ simple, as long as the thorax, a little longer than the palpi. Abdomen not extending so far as the hind wings. Legs stout; hind tibiæ with four moderately long spurs. Wings rather broad. Fore wings almost straight along the costa, rounded at the tips, slightly oblique and convex along the exterior border; three inferior veins; first and second contiguous at the base; third not remote.

1. MONEMA FLAVESCENS.

Fœm. *Flava; antennæ fulvæ; abdomen pallide luteum, basi supra albido-flavum; pedes antici intus lutei, tarsis intus fuscis; alæ anticæ fasciis duabus angustis obliquis fuscis.*

Female. Yellow. Antennæ tawny. Abdomen pale luteous, whitish yellow towards the base above. Fore legs luteous on the inner side; fore tarsi brown on the inner side. Fore wings with two slender oblique brown bands, which are united near the tip of the costa, and diverge thence towards the interior border; the inner one not extending beyond the middle of the wing. Length of the body 6 lines; of the wings 15 lines.

a. North China. From Mr. Cuming's collection.

Genus 7. COSUMA.

Corpus robustum. Proboscis non conspicua. Palpi validi, valde pilosi, subascendentes, caput superantes. Antennæ thorace paullo longiores. Abdomen alas posticas non superans. Pedes validi, dense pilosi; tibiæ posticæ calcaribus duobus minimis apicalibus. Alæ latiusculæ, breviusculæ, dense vestitæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore subconvexo non obliquo. *Mas.*—Antennæ late pectinatæ, apices versus subpectinatæ. *Fœm.*—Antennæ simplices.

Body stout. Proboscis not visible. Palpi stout, very pilose, slightly ascending, extending rather beyond the head. Antennæ a little longer than the thorax. Abdomen extending as far as the hind wings. Legs stout, densely pilose; hind tibiæ with very minute apical spurs. Wings rather short and broad, densely clothed. Fore wings nearly straight in front, rounded at the tips, slightly convex but not oblique along the exterior border; interior angle rounded; first and second inferior veins approximate at the base; third rather nearer to the second than to the fourth. *Male.*—Antennæ deeply pectinated to a little beyond half the length, slightly pectinated from thence to the tips. *Female.*—Antennæ simple.

1. Cosuma rugosa.

Mas. *Flava, luteo varia; antennæ fuscæ; pectus anticæ pedesque antici ferruginea; abdomen et alæ posticæ testacea; alæ anticæ fascia discoque ex parte fuscis.*

Male. Yellow, here and there luteous. Palpi luteous, with yellow tips. Antennæ brown. Pectus in front, fore femora and fore tibiæ ferruginous. Abdomen and hind wings testaceous. Fore wings more or less brown in front and on the fore part of the disk, with a slender oblique ridged brownish band, which extends across the middle, and with a yellow discal dot very near the outer side of the band. Length of the body 6 lines; of the wings 13 lines.

a—*c*. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 8. SUSICA.

Corpus vix robustum. Proboscis non conspicua. Palpi validi, longi, porrecti, pilosi, caput longe superantes; articulus 3us conicus. Abdomen alas posticas non superans. Pedes pilosi, sat validi; tibiæ posticæ calcaribus quatuor longis. Alæ sat latæ, non longæ. Anticæ apud costam subrectæ, apice rotundatæ, margine exteriore subconvexo non obliquo, angulo exteriore rotundato. *Mas.*—Antennæ latæ pectinatæ, apice nudæ. *Fœm.*—Antennæ simplices.

Body hardly stout. Proboscis obsolete. Palpi stout, long, pilose, porrect, extending far beyond the head; third joint conical, not more than one-fourth of the length of the second. Abdomen extending as far as the hind wings. Legs pilose, moderately stout; hind tibiæ with four long spurs. Wings rather broad, not long.

Fore wings almost straight along the costa, rounded at the tips, slightly convex and not oblique along the exterior border; interior angle rounded; first and second inferior veins approximate at the base; third nearer to the second than to the fourth. *Male.*—Antennæ deeply pectinated to three-fourths of the length, minutely pectinated from thence to the tips. *Female.*—Antennæ simple.

1. Susica pallida.

Mas. *Pallide testacea; palpi pedesque ex parte albo pilosi; abdomen apice fuscescens; alæ anticæ fusco conspersæ, posticæ fuscescentes.*

Male. Pale testaceous. Palpi and legs partly clothed with white hairs. Antennæ whitish, with testaceous branches. Abdomen brownish towards the tip. Fore wings with dark brown flecks, which are most prevalent in front towards the base, and form a slender upright subapical band; under side darker testaceous, shining, brown towards the base. Hind wings brownish; under side testaceous, shining, slightly flecked with brown. Length of the body 4 lines; of the wings 10 lines.

a. East Indies. From Archdeacon Clerk's collection.
b. North India. From Mr. L. James' collection.

Genus 9. ROMOSA.

Mas. Corpus robustum. Proboscis non conspicua. Palpi porrecti, subarcuati, caput non superantes; articulus 3us conicus, minimus. Antennæ sat late pectinatæ, thorace paullo breviores. Abdomen alas posticas paullo superans. Pedes validi, late ciliatæ; tibiæ posticæ calcaribus quatuor mediocriter longis; alæ vix latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo vix convexo.

Male. Body stout. Proboscis not visible. Palpi porrect, slightly curved, extending as far as the head; third joint conical, very minute. Antennæ rather deeply pectinated, a little shorter than the thorax. Abdomen extending for one-fourth of its length beyond the hind wings. Legs stout, deeply ciliated; hind tibiæ with four moderately long spurs. Wings hardly broad. Fore wings straight in front, rounded at the tips, oblique and very slightly convex along the exterior border; interior angle rounded; first and second inferior veins approximate at the base; third and fourth united towards the base, and thus forming a common petiole.

1. ROMOSA INVARIA.

Mas. *Luteo-cervina; alarum anticarum venæ basi subferrugineæ.*

Male. Luteous fawn-colour. Antennæ rather paler. Veins towards the base of the fore wings somewhat ferruginous. Length of the body 6 lines; of the wings 14 lines.

a. Honduras. From Mr. Dyson's collection.

Genus 10. LARUMA.

Mas. Corpus robustum, dense pilosum. Proboscis non conspicua. Palpi brevissimi, pilosissimi. Antennæ latissime pectinatæ, thorace paullo longiores. Abdomen apice fasciculatum, alas posticas vix superans. Pedes validi, dense pilosi. Alæ latæ, non longæ; anticæ apud costam subrectæ, apice vix angulatæ, margine exteriore subobliquo, angulo interiore rotundato.

Male. Body stout, thickly pilose. Proboscis not visible. Palpi very short and pilose. Antennæ very deeply pectinated, rather longer than the thorax. Abdomen tufted at its tip, extending very little beyond the hind wings. Legs stout, densely pilose. Wings broad, not long. Fore wings almost straight in front; hardly angular at the tips, slightly oblique along the exterior border; interior angle rounded; three inferior veins; second much nearer to the first than to the third.

1. LARUMA HETEROGENEA.

Mas. *Obscure fusca; alæ anticæ fasciis angustis undulosis subcinereis guttaque discali nigra.*

Bombyx heterogenea, *MSS.*

Male. Dark brown. Fore wings with slender undulating grayish bands, one near the base, the other two beyond a blackish discal dot, the third double towards the costa. Length of the body 7 lines; of the wings 14 lines.

Venezuela. In Mr. Saunders' collection.

Genus 11. DORATIFERA.

Mas et fœm. Corpus incrassatum. Proboscis non conspicua. Palpi breves, porrecti, pilosi, caput non superantes; articulus 3us minutus. Antennæ corporis dimidio longiores. Abdomen alas

posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ latæ, breviusculæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo, angulo interiore rotundato. *Mas.*—Antennæ mediocriter pectinatæ, dimidio apicali serratæ. *Fœm.*—Antennæ simplices, graciles. Abdomen lanuginosum.

Doratifera, *Westw.*; *Duncan, Nat. Libr.* xxxvii. *Exotic Moths*, 181.

Bombyx, p., *Lewin*; *Boisd.*

Body very stout. Proboscis not visible. Palpi short, porrect, pilose, not extending beyond the head; third joint minute. Antennæ more than half the length of the body. Abdomen extending as far as the hind wings. Legs stout, pilose; hind tibiæ with two minute apical spurs. Wings broad, rather short. Fore wings straight along the costa, rounded at the tips, oblique along the exterior border; interior angle rounded; discal areolet intersected by a secondary vein; second inferior vein hardly further from the third than from the first; third full twice further from the fourth than from the second. *Male.*—Antennæ moderately pectinated to half the length, serrated from thence to the tips. *Female.*—Antennæ simple, slender. Abdomen stouter than that of the male, lanuginose on each side and beneath.

1. Doratifera vulnerans.

Ferruginea; caput apud antennas album; palpi albi, basi fusci; pedes antici albo cincti; alæ anticæ fuscæ, fasciis rugulosis nitentibus ferrugineis, maculis duabus margineque exteriore canis; posticæ fusco-fulvæ.

Bombyx vulnerans, *Lewin*, *Prodr. Ent.* 5, pl. 4. *Boisd. Voy. de l'Astrolabe*, Pt. 1. *Lep.* 220, 1.

Doratifera vulnerans, *Westw. Duncan, Nat. Libr.* xxxvii. *Exotic Moths*, 181, pl. 22, f. 5.

Ferruginous. Head white about the base of the antennæ. Palpi white, brown towards the base. Fore legs with white bands. Fore wings brown, rippled with ferruginous shining bands, with a hoary spot near the base, and another larger one behind the tip of the discal areolet, exterior border hoary. Hind wings brownish tawny. Length of the body 5—6 lines; of the wings 12—14 lines.

a—d. New Holland. Presented by E. Doubleday, Esq.

Genus 12. ANAPÆA.

Fœm. Corpus crassum. Proboscis non conspicua. Palpi breves, graciles, porrecti, caput non superantes; articulus 3us minutus, conicus, acutus. Antennæ simplices, graciles, corporis dimidio longiores. Abdomen dense lanuginosum, alas posticas paullo superans. Pedes graciles, subpilosi; tarsi longiusculi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ sat longæ; anticæ apud costam rectæ, apice rotundatæ, apud marginem exteriorem obliquæ, angulo interiore rotundato.

Female. Body very stout. Proboscis not visible. Palpi short, slender, porrect, not extending beyond the head; third joint minute, conical, acute. Antennæ simple, slender, more than half the length of the body. Abdomen densely lanuginose above and on each side beneath, extending a little beyond the hind wings. Legs slender, thinly pilose; tarsi rather long; hind tibiæ with two minute apical spurs. Wings moderately long. Fore wings straight along the costa, somewhat rounded at the tips, oblique along the exterior border; interior angle rounded.

1. ANAPÆA CONFUSA.

Fœm. *Ferrugineo-fusca; caput supra testaceum; thorax vitta ochraceo-fulva; abdomen nigricans, vitta subtus ochraceo-fulva; alæ anticæ strigis undulosis margineque exteriore canis; posticæ cinereæ fimbria cana.*

Female. Much resembles the female of *Pelora Oxlei.* Ferruginous-brown. Head above testaceous. Thorax with an orange-tawny stripe. Abdomen blackish, with an orange-tawny stripe beneath. Fore wings with hoary undulations, hoary also and shining along the exterior border. Hind wings gray, with a hoary fringe. Length of the body 8 lines; of the wings 20 lines.

a. New Holland. Presented by H. G. Harrington, Esq.

2. ANAPÆA QUADRIGUTTATA.

Fœm. *Ferruginea; caput testaceo varium; abdomen testaceo bivittatum, subtus fusco lanuginosum; alæ anticæ rugis pallidis obliquis nitentibus maculisque quatuor obscuris testaceo marginatis; posticæ pallide cervinæ, apud margines subferrugineæ.*

Female. Ferruginous. Head testaceous about the eyes. Abdomen with a testaceous stripe on each side, with brown wool beneath and on each side at the tip. Fore wings with slight pale oblique shining ripples, and with four small testaceous-bordered dark spots, which form an oblique and widely interrupted band in the disk; the two anterior spots brown, rather smaller than the two posterior, which are black. Hind wings pale fawn-colour, slightly ferruginous along the borders. Length of the body 6 lines; of the wings 16 lines.

a. New South Wales. From Mr. Milne's collection.

Genus 13. PELORA.

Mas et fœm. Corpus pilosum, incrassatum. Proboscis non conspicua. Palpi porrecti, breviusculi, sat graciles, caput vix superantes; articulus 3us minimus. Antennæ corporis dimidio multo longiores. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticas calcaribus duobus parvis apicalibus. Alæ sat angustæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore perobliquo. *Mas.*—Antennæ sat late pectinatæ, dimidio apicali subpectinatæ. *Fœm.*—Antennæ graciles, simplices. Abdomen dense lanuginosum, alas posticas vix superans.

Doratifera, p., *Newman.*

Male and female. Body very stout and pilose. Proboscis very short or obsolete. Palpi porrect, rather short and slender, hardly extending beyond the head; second joint much longer than the first; third very minute. Antennæ much more than half the length of the body. Abdomen extending a little beyond the hind wings. Legs stout, pilose; hind tibiæ with two small apical spurs. Wings rather narrow. Fore wings straight along the costa; rounded at the tips, very oblique along the exterior border; first and second inferior veins nearly contiguous at the base; third much further from the fourth than from the second. *Male.*—Antennæ rather deeply pectinated to half the length from the base, slightly pectinated from thence to the tips. *Female.*—Antennæ slender, simple. Abdomen densely lanuginose on each side and beneath, extending very little beyond the hind wings.

1. Pelora Oxlei.

Mas. *Obscure fusca ; caput supra rufescens, flavo bimaculatum ; palpi rufescentes ; thorax maculis sex rufescentibus ; abdomen fascia basali rufescente, apice læte flavo ; pedes ex parte flavo pilosi ; alæ subcinereæ, semihyalinæ, margine obscure fuscis.*

Male. Dark brown. Head above and palpi reddish; a pale yellow spot on each side by the antennæ. Thorax with three reddish spots on each side. Abdomen with a reddish band near the base, bright pale yellow at the tip. Legs partly clothed with pale yellow hairs. Wings grayish, semihyaline, with dark brown borders. Length of the body 5 lines; of the wings 10 lines.

a. Sydney. From Mr. Lambert's collection.
b. Sydney. Presented by E. Doubleday, Esq.
c. Sydney. From Mr. Argent's collection.

Fœm. *Rufo-fusca ; caput supra et thoracis discus ochraceo-fulva ; pedes ex parte flavo-hirti ; abdomen nigricans, disco subtus ochraceo fulvo ; alæ anticæ cano undulosæ, margine exteriore cano nitente ; posticæ cinereæ.*

Bombyx (Doratifera?) Oxlei, *Newman, Zoologist*, ccxi.

Female. Reddish brown. Head above and disk of the thorax orange-tawny. Legs partly clothed with pale yellow hairs. Abdomen blackish; disk beneath orange-tawny. Fore wings with hoary undulations, wholly hoary and shining along the exterior border. Hind wings gray, with a hoary fringe. Length of the body 7 lines; of the wings 18 lines.

a. New Holland. Presented by E. Doubleday, Esq.
b. New Holland. From Mr. Argent's collection.

2. Pelora pinguis.

Fœm. *Albido-cervina, incrassata, pilosissima ; abdomen lanugine nigra dense vestitum ; pedes pallide fusci, tibiæ anteriores fasciis argenteis ; alæ anticæ fasciis duabus obliquis incompletis cervinis.*

Female. Whitish fawn-colour. Body short, hairy, very stout. Palpi short, pilose; third joint minute, conical, acute. Antennæ

quite simple, setaceous, about three-fourths of the length of the body. Abdomen with very thick blackish wool on each side and beneath, not extending beyond the hind wings. Legs pale brown; anterior tibiæ with silvery white bands. Fore wings with two indistinct oblique darker fawn-coloured bands between the end of the discal areolet and the exterior border; costal part also rather darker than the wings elsewhere; second inferior vein rather further from the third than from the first; third rather further from the fourth than from the second. Length of the body 4—6 lines; of the wings 12—16 lines.

Var. β. White. Head, palpi, fore part of the thorax, abdomen beneath and legs pale luteous. Fore wings with an indistinct testaceous tinge; costa pale luteous.

a, *b*. Van Dieman's Land. From Mr. A. J. Smith's collection.
c, *d*. Van Dieman's Land. Presented by Morton Allport, Esq.
e. New Holland. From Mr. Milne's collection.
f. New Holland. Presented by the late Earl of Derby.

Genus 14. TALIMA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi porrecti, longiusculi; subarcuati, caput superantes; articulus 3us obtusus, minimus. Antennæ thorace vix longiores, sat late pectinatæ, apices versus simplices. Pedes validi; tibiæ posticæ calcaribus duobus apicalibus sat longis. Alæ breviusculæ; anticæ sat angustæ, apud costam rectæ, apice rotundatæ, margine exteriore perobliquo, angulo interiore valde rotundato.

Male. Body rather stout. Proboscis not visible. Palpi porrect, rather long, slightly curved, extending beyond the head; third joint obtuse, very minute. Antennæ hardly longer than the thorax, rather deeply pectinated to a little beyond half the length, simple from thence to the tips. Legs stout; hind tibiæ with two moderately long apical spurs. Wings rather short. Fore wings rather narrow, straight along the costa, rounded at the tips, very oblique along the exterior border; interior angle much rounded; second inferior vein twice further from the third than from the first; third twice further from the fourth than from the second. Hind wings slightly truncated along the exterior border, somewhat attenuated towards the interior angle.

1. TALIMA POSTICA.

Mas. *Ochraceo-rufa; antennæ et abdomen fulva; alæ anticæ fascia exteriore cinerascente intus nigro marginata; posticæ albæ striga fusca, apud marginem interiorem testaceæ.*

Male. Ochraceous-red. Antennæ and abdomen tawny. Fore wings with a grayish band along the exterior border; the interior side of this band is blackish and undulating. Hind wings white, testaceous along the interior border, and with a brown streak which extends from the disk to the interior angle. Length of the body 4 lines; of the wings 10 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 15. MECYTHA.

Mas et fœm. Corpus robustum. Proboscis non conspicua. Palpi validi, porrecti, pilosi, caput non superantes; articulus 3us minutus, conicus, acutus. Antennæ thorace vix longiores. Abdomen alas posticas vix superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor sat longis. Alæ latiusculæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore obliquo, angulo interiore rotundato. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ simplices.

Male and female. Body stout. Proboscis not visible. Palpi stout, porrect, pilose, extending as far as the head; third minute, conical, acute. Antennæ very little longer than the thorax. Abdomen hardly extending beyond the hind wings. Legs stout, pilose; hind tibiæ with four moderately long spurs. Wings rather broad. Fore wings straight in front, rounded at the tips, oblique along the exterior border; interior angle much rounded; three inferior veins; second more than twice further from the third than from the first. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ simple.

1. MECYTHA SEMICANA.

Fulva; caput supra et palpi nigricantia; thorax fascia antica fusca albo nigroque marginata; abdomen supra nigro-fuscum, apice album; pedes ex parte albo hirti; tibiæ tarsique albo nigroque fasciata; alæ fuscæ, marginibus albidis fusco guttatis; anticæ strigis undulosis obliquis nigricantibus plagaque albida subapicali. Mas.—*Thorax albus; alæ anticæ vitta excavata alba apud marginem interiorem.*

Tawny. Head above and palpi blackish. Antennæ tawny. Thorax in front with a brown band, which is bordered with white in front and with black behind. Abdomen above mostly blackish brown; tip white. Legs partly clothed with white hairs; tibiæ and tarsi with black and white bands. Wings brown, with whitish borders, which include a row of brown dots. Fore wings with some indistinct undulating oblique blackish streaks, and with a large white patch towards each tip. *Male.*—Thorax white. Fore wings with an indented white stripe along the interior border. Length of the body 5—8 lines; of the wings 14—16 lines.

a. New Holland. Presented by E. Doubleday, Esq.
b. Sydney. From Mr. Lambert's collection.
c. New Holland. From Mr. Milne's collection.
d. ——— ?

2. Mecytha trimacula.

Mas. *Nigro-fusca; caput et thorax supra alba; antennæ nigræ; thorax nigro trimaculatus; abdomen apice album, subtus albo vittatum; tarsi nigro fasciati; alæ anticæ fasciis duabus valde diffusis albidis, maculis tribus discalibus guttisque exterioribus nigris.*

Male. Blackish brown. Head and thorax above white. Antennæ black. Thorax with three black spots; one semicircular, in front of the other two. Abdomen with a white tip; under side with a slender white stripe. Tarsi with white bands. Fore wings with two very diffuse whitish bands, with three black spots in the disk, and with a row of blackish dots near the exterior border. Length of the body 6 lines; of the wings 16 lines.

a. Van Dieman's Land. Presented by Morton Allport, Esq.

3. Mecytha testacea.

Mas. *Testacea; antennæ nigræ; pedes ex parte nigro hirti; alæ anticæ apud costam fuscescentes.*

Male. Testaceous. Antennæ black. Legs partly clothed with black hairs. Fore wings brownish on the costa. Length of the body 5 lines; of the wings 12 lines.

a. ——— ?

Genus 16. MIRESA.

Mas et fœm. Corpus robustum. Proboscis non conspicua. Palpi pilosi, sat validi, vix ascendentes; caput non superantes; articulus 3us minimus. Antennæ thorace non longiores. Abdomen alas posticas non superans. Pedes validi, densissime pilosi; tibiæ posticæ calcaribus duobus minimis apicalibus. Alæ sat latæ, non longæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subobliquo, angulo interiore rotundato. *Mas.*—Antennæ subpectinatæ, basi late pectinatæ. *Fœm.*—Antennæ simplices.

Body stout. Proboscis obsolete. Palpi pilose, rather stout, hardly ascending, not extending beyond the head; third joint very minute. Antennæ as long as the thorax. Abdomen extending as far as the hind wings. Legs stout, very densely pilose; hind tibiæ with very minute apical spurs. Wings rather broad, not long. Fore wings straight in front, rounded at the tips, slightly oblique along the exterior border; interior angle rounded; second inferior vein a little further from the third than from the first; third about twice further from the fourth than from the second. *Male.*—Antennæ deeply pectinated to one-third of the length, slightly pectinated from thence to the tips. *Female.*—Antennæ simple.

A. Alæ anticæ argenteo variæ.
  A. Alæ anticæ gutta discali argentea.
    a. Alæ anticæ argenteo non conspersæ.
albipuncta, *Herr.-Schæff.*
    b. Alæ anticæ apud apices argenteo conspersæ. guttifera, *Walk.*
  B. Alæ anticæ striga postica guttisque marginalibus argenteis.
argentifera, *Walk.*
B. Alæ anticæ argenteo non variæ.
  A. Alæ anticæ luteo fasciatæ. - - - decedens, *Walk.*
  B. Alæ anticæ non fasciatæ. - - - - inornata, *Walk.*

1. Miresa albipuncta.

Mas et fœm. *Flava; caput antice luteum; pectus, abdomen et pedes fulva; alæ anticæ ferrugineæ, plaga subobsoleta fulva apud marginem interiorem guttaque discali argentea; posticæ testaceæ.*

Nyssia albipuncta, *Herr.-Schæff. Lép. Exot. Sp. Sér.* 1. f. 179.

Yellow. Head in front and palpi luteous. Antennæ, pectus, abdomen and legs tawny. Fore wings ferruginous, with a large indistinct tawny spot, extending along half the length of the inner

border from the base, and with a small discal silvery white spot; under side testaceous, shining, tawny along the costa. Hind wings testaceous. Length of the body 5—7 lines; of the wings 12—17 lines.

Var. β. Hind wings whitish above.

a, *b*. North India. From Mr. Stevens' collection.
c, *d*. North India. From Mr. L. James' collection.
e, *f*. ——— ?

2. MIRESA ARGENTIFERA.

Mas. *Læte flava; caput ex parte, palpi, antennæ, pectus et pedes rufo-fulva; thorax vitta, fascia apiceque luteis; abdomen pallide luteum; pedes posteriores ferrugineo ciliati; alæ anticæ fulvæ, striga guttisque argenteis; posticæ testaceæ, macula flavescente.*

Male. Head and thorax bright yellow. Head reddish tawny in front and at the base of the antennæ. Palpi, antennæ, pectus and legs reddish tawny. Thorax with a slender luteous stripe and a slight interrupted luteous band; hind part luteous. Abdomen pale luteous. Posterior legs ciliated with ferruginous hairs. Fore wings tawny; a testaceous spot towards the interior border; hind part of the disk testaceous; some silvery white dots and atoms along the exterior border, and a short oblique undulating silvery streak joining the interior border at two-thirds of the length; under side testaceous, tawny towards the costa. Hind wings testaceous; fringe paler; a yellowish spot by the interior angle. Length of the body 7 lines; of the wings 15 lines.

a. Ceylon. Presented by R. Templeton, Esq.

3. MIRESA GUTTIFERA.

Mas. *Flava; caput antice, palpi, antennæ, pectus et pedes rufo-flava; alæ anticæ rufo-fulvæ, gutta discali subtrigona flavido-alba; posticæ pallide testaceæ.*

Male. Head and thorax yellow. Head in front, palpi, antennæ, pectus and legs reddish yellow. Abdomen testaceous? Fore wings reddish tawny, somewhat glossy, with a yellowish white almost triangular dot by the tip of the discal areolet; interior border with a long shallow excavation; under side and hind wings pale testaceous, a little darker about the costa. Length of the body 6 lines; of the wings 13 lines.

East Indies. In Mr. Saunders' collection.

4. MIRESA DECEDENS.

Mas. *Ferruginea; vertex flavus, ex parte luteus; thorax flavus, luteo trivittatus; abdomen basi apiceque flavescens; alæ anticæ fascia obliqua subobsoleta flavescente.*

Male. Ferruginous. Vertex yellow, partly luteous. Thorax yellow, with three slight luteous stripes, partly luteous in front. Abdomen mostly yellow at the base and at the tip. Fore wings with an oblique very indistinct yellowish band beyond the middle. Length of the body 6 lines; of the wings 13 lines.

a. North India. From Mr. L. James' collection.

5. MIRESA INORNATA.

Fœm. *Lutea; caput antice subtusque, pectus, abdomen, pedes et alæ ferruginea; alæ anticæ apud marginem interiorem luteæ; posticæ luteo marginatæ.* M. decedens, *fœm.?*

Female. Luteous. Head in front and beneath, pectus, abdomen except at the base, legs and wings ferruginous. Fore wings luteous towards the interior border. Hind wings with luteous borders. Length of the body 7 lines; of the wings 18 lines.

a. Bengal. Presented by W. Masters, Esq.

Genus 17. SOMARA.

Fœm. Corpus pilosum, sat robustum. Proboscis non conspicua. Palpi graciles, porrecti, subpilosi, caput non superantes; articulus 3us lanceolatus, sat longus. Antennæ graciles, simplices, corporis dimidio multo breviores. Pedes robusti, valde pilosi; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ sat latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore sat obliquo; posticæ abdomen superantes.

Female. Body pilose, moderately stout. Proboscis very short or obsolete. Palpi porrect, slender, slightly pilose, not extending beyond the head; second joint very much longer than the first; third lanceolate, moderately long. Antennæ slender, simple, not near half the length of the body. Abdomen not extending so far as the hind wings. Legs very stout and pilose; hind tibiæ with two small apical spurs. Wings moderately broad, Fore wings straight along the costa, rounded at the tips, rather oblique along the exterior border; second inferior vein about twice further from the third than from the first; third rather nearer to the second than to the fourth.

1. Somara canescens.

Fœm. *Fulva; thorax albidus; abdominis latera subtus apicem versus fusca; pedes fusci; alæ anticæ albido conspersæ, fasciaque gracili obliqua subrecta ferruginea; posticæ pallidiores.*

Female. Tawny. Thorax whitish. Abdomen brown on each side beneath towards the tip. Legs brown. Fore wings thickly powdered with whitish flecks, which are most prevalent towards the costa, and with a slender oblique nearly straight ferruginous band, which is at three-fourths of the length of the wing. Hind wings a little paler than the fore wings. Length of the body 6½ lines; of the wings 18—20 lines.

a, *b*. Sierra Leone. Presented by the Rev. D. F. Morgan.

Genus 18. CAMILA.

Fœm.? Corpus sat gracile. Proboscis non conspicua. Palpi breves, porrecti, caput non superantes; articulus 3us minutus, conicus. Antennæ simplices, filiformes, thorace paullo longiores. Pedes validi; ciliati; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ; margine exteriore sat obliquo, angulo interiore valde rotundato.

Female? Body rather slender. Proboscis not visible. Palpi short, porrect, extending as far as the head; third joint minute, conical. Antennæ simple, filiform, a little longer than the thorax. Abdomen mutilated. Legs stout, ciliated; hind tibiæ with two minute apical spurs. Wings moderately broad. Fore wings straight along the costa, rounded at the tips, rather oblique along the exterior border; interior angle much rounded; first and second inferior veins approximate at the base; third and fourth united near the base.

1. Camila cilipes.

Fœm.? *Murina; thorax maculis duabus anticis parvis albis; alæ anticæ guttis quatuor marginalibus nigris.*

Female? Mouse-colour. Thorax with two small white spots in front. Fore wings with two small black dots near the tip of the costa, and opposite to two others by the exterior border. Length of the body 5 lines; of the wings 14 lines.

a. ———?

Genus 19. PERNA.

Corpus robustum. Proboscis non conspicua. Palpi breves, valde pilosi, caput non superantes; articulus 3us minimus. Antennæ thorace non longiores. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ mediocriter latæ; anticæ apud costam rectæ, apice vix angulatæ, margine vix convexo. *Mas.*—Antennæ sat late pectinatæ. Alæ anticæ apud marginem exteriorem vix obliquæ. *Fœm.*—Antennæ vix pectinatæ. Alæ anticæ apud marginem exteriorem sat obliquæ.

Body stout. Proboscis not visible. Palpi short, very pilose, not extending beyond the head; third joint very minute. Antennæ as long as the thorax. Abdomen extending a little beyond the hind wings. Legs stout, pilose; hind tibiæ with two minute apical spurs. Wings moderately broad. Fore wings straight along the costa, hardly angular at the tips, hardly convex along the exterior border; discal areolet intersected by a secondary vein; first and second inferior veins almost contiguous at the base; third nearer to the second than to the fourth. *Male.*—Antennæ rather deeply pectinated to the tips. Wings rather short. Fore wings very slightly oblique along the exterior border. *Female.*—Antennæ very minutely pectinated. Wings moderately long. Fore wings rather oblique along the exterior border.

A. Thorax fuscus.
  A. Abdomen apice obscurum. - - - exposita, *Lewin.*
  B. Abdomen apice album. - - - - varia, *Walk.*
B. Thorax luteus. - - - - - - flavescens, *Walk.*

1. PERNA EXPOSITA.

Mas. *Ferrugineo-fusca; thorax cano varius; abdomen ferrugineum; alæ anticæ macula basali nigra, fasciis tribus angulosis nigris, albo ex parte marginatis, strigaque nigra discali albo uniputtata.* Fœm.—*Cinereo-fusca; alæ anticæ macula basali fasciisque tribus angulosis subobliquis nigricantibus.*

Bombyx exposita, *Lewin, Prodr. Ent.* 8, pl. 7. *Boisd. Voy. de l'Astrolabe,* Pt. 1. *Lep.* 223, 5.

Bombyx pusilla, *Donov. Ins. New Holl. Lep.* pl. *Boisd. Voy. de l'Astrolabe,* Pt. 1. *Lep.* 222, 4.

Male. Ferruginous-brown. Thorax with many hoary hairs. Abdomen ferruginous. Fore wings with a black mark at the base, and with three somewhat zigzag black bands; first and third bands bordered with white on the inner side; second band bordered with white on the outer side; first and second bands connected by a black discal streak, which includes a white spot. Length of the body 5 lines; of the wings 10 lines. *Female.*—Cinereous-brown. Fore wings with a blackish mark at the base, and with three slight oblique zigzag blackish bands, the first and third band occasionally obsolete. Length of the body 5 lines; of the wings 14 lines.

a—c. New Holland. Presented by E. Doubleday, Esq.
d. New Holland. From Mr. Milne's collection.

2. Perna varia.

Mas. *Obscure fusca; caput et thorax luteo albo nigroque varia; abdomen apice album; tarsi luteo cincti; alæ anticæ costa maculisque nonnullis luteis, apud discum ex parte rufescentes, gutta discali alba, fimbria albo guttata.*

Male. Dark brown. Head clothed with luteous, white and black hairs. Palpi luteous, black above, except towards the tips. Antennæ luteous, with dark brown branches. Fore part of the thorax and fore legs clothed with luteous, white and black hairs. Abdomen with white hairs at the tip. Tarsi with luteous bands. Fore wings luteous along the costa, with some luteous marks on the veins, partly reddish in the disk, with a white dot on the discal areolet; fringe with white dots. Length of the body 5½ lines; of the wings 11 lines.

a. Sydney. From Mr. Lambert's collection.
b. ——— ?

3. Perna? flavescens.

Mas. *Flava; caput luteum; pectus fuscum; abdomen fulvum, subtus apiceque fuscum; pedes fuscescentes; alæ anticæ fuscescentes, apud costam rufescentes, fascia discali obliqua gracili subundulata; posticæ rufæ, fascia fimbriaque flavis, guttis duabus nigris.*

Male. Mutilated. Yellow. Head and palpi pale luteous. Antennæ yellowish, with black branches. Pectus pale brown. Abdomen pale tawny, brownish at the tip and beneath. Legs brownish. Fore wings brownish, partly reddish along the costa, with a slender oblique slightly undulating yellow band in the disk. Hind wings

red, with a yellow band like that of the fore wings and with a yellow fringe; a black dot in the disk on the inner side of the yellow band, and another on the same vein nearer the base of the wing. Length of the body 5 lines; of the wings 12 lines.

a. New Holland. Presented by H. G. Harrington, Esq.

Genus 20. AGISA.

Mas. Corpus sat robustum, valde pilosum. Proboscis non conspicua. Palpi brevissimi. Antennæ mediocriter pectinatæ, apices versus simplices. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ late ciliatæ, posticæ calcaribus duobus longis apicalibus. Alæ mediocriter latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore subobliquo.

Male. Body rather stout, very pilose. Proboscis obsolete. Palpi very short, not distinct. Antennæ moderately pectinated to two-fifths of the length, simple from thence to the tips. Abdomen extending as far as the hind wings. Legs rather slender; tibiæ deeply ciliated; hind tibiæ with two long apical spurs. Wings moderately broad. Fore wings straight along the costa, rounded at the tips, slightly oblique along the exterior border; second inferior vein very little nearer to the first than to the third; third much further from the fourth than from the second.

1. AGISA RUFO-FLAVA.

Mas. *Rufa; caput subtus, pectus, abdomen, pedes et alæ posticæ flava; abdomen basi supra rufum; pedes rufo ciliati; alæ posticæ macula apud angulum interiorem fusca.*

Male. Red. Head beneath, pectus, abdomen, legs and hind wings yellow. Antennæ testaceous. Abdomen red above towards the base. Legs ciliated with red hairs. Hind wings with a brown spot on the interior angle. Length of the body 4 lines; of the wings 9 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 21. METRAGA.

Mas. Corpus robustum. Proboscis non conspicua. Palpi validi, porrecti, caput vix superantes; articulus 3us minimus, conicus. Antennæ simplices, subsetiformes, thorace paullo longiores.

Abdomen alas posticas non superans. Pedes validi, ciliati. Alæ sat latæ; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriore obliquo, angulo interiore rotundato.

Male. Body stout. Proboscis not visible. Palpi stout, porrect, extending very little beyond the head; third joint minute, conical. Antennæ simple, very nearly setiform, a little longer than the thorax. Abdomen extending as far as the hind wings. Legs stout, ciliated. Wings moderately broad. Fore wings hardly convex along the costa, rounded at the tips, oblique along the exterior border; interior angle rounded; first and second inferior veins nearly contiguous at the base; third much further from the fourth than from the second.

1. METRAGA PERPLEXA.

Mas. *Nigro-fusca, subtus fusca; thorax postice fuscus; abdomen fuscum; pedes antici nigro-fusci.*

Male. Blackish brown. Hind part of the thorax, abdomen and under side brown. Fore part of the pectus and fore legs blackish brown. Length of the body 5 lines; of the wings 14 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 22. SEMYRA.

Mas. Corpus robustum. Proboscis non conspicua. Palpi validi, pilosi, longiusculi, oblique ascendentes, caput superantes; articulus 3us conicus, brevis. Antennæ mediocriter pectinatæ, basi subpectinatæ, thorace paullo longiores. Abdomen alas posticas vix superans. Pedes pilosi, sat validi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ breviusculæ, sat latæ; anticæ apud costam rectæ, apice rotundatæ, margine exteriore sat obliquo.

Male. Body stout. Proboscis not visible. Palpi rather long, stout, pilose, obliquely ascending, extending beyond the head; third joint conical, not one-fourth of the length of the second. Antennæ moderately pectinated, very slightly pectinated towards the base, a little longer than the thorax. Abdomen extending full as far as the hind wings. Legs rather stout and pilose; hind tibiæ with minute apical spurs. Wings rather short, moderately broad. Fore wings straight along the costa, rounded at the tips, rather oblique along the exterior border; interior angle rounded; inferior veins nearly equidistant from each other.

A. Alæ anticæ argenteo vittatæ. - - - coarctata, *Walk.*
B. Alæ anticæ macula rufa albido marginata. - bella, *Boisd.*
C. Alæ anticæ argenteo aut albido non ornatæ.
A. Alæ fuscæ aut cervinæ.
a. Alæ anticæ maculis quatuor nigro-fuscis. - finita, *Walk.*
b. Alæ anticæ non maculatæ. - - - quadrata, *Walk.*
B. Alæ albidæ. - - - - - - - eriophora, *Anon.*

1. SEMYRA COARCTATA.

Mas. *Ferruginea; alæ anticæ striga argentea, vittaque lata coarctata nigro-fusca, hac apicem versus albido strigata.*

Male. Ferruginous. Fore wings with a silvery streak near the base, extending from the disk to the interior border, and with a broad blackish brown stripe which extends from the tip of the costa to the middle of the interior border, and is coarctate in the middle, and contains some whitish streaks by its tip. Length of the body 4 lines; of the wings 10 lines.

Nearly allied to the following species, but apparently distinct.

a. Brazil? Presented by J. G. Children, Esq.
b. Rio Janeiro. From the Voyage of H.M.S. Rattlesnake.

2. SEMYRA BELLA.

Mas. *Ferruginea; alæ anticæ fuscæ, apud marginem exteriorem pallidiores, macula postica trigona rufa albido marginata, maculaque costali subapicali cinerea albo submarginata strigulamque albam furcatum emittente; posticæ sordide roseæ.*

Limacodes bella, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 181.

Male. Ferruginous. Fore wings brown, paler along the exterior margin, with a triangular red whitish bordered spot by the interior border near the base, and with a gray costal subapical spot, which is bordered with white, and emits from its inner side a little furcate white line. Hind wings dingy rose-colour.

Bahia.

3. SEMYRA FINITA.

Mas. *Ferrugineo-fusca, subtus testacea; thorax testaceus, antice ferrugineo-fuscus; alæ anticæ apud costam fulvæ, apices versus canæ, maculis quatuor nigro-fuscis unaque cinerascente subapicalibus; posticæ testaceæ.*

Male. Ferruginous-brown; under side mostly testaceous. Antennæ pale testaceous. Thorax mostly testaceous, ferruginous brown in front. Fore wings tawny on the costa, hoary towards the tips; a gray spot near the tip of the costa, partly bordered by four blackish brown spots of various form and size. Hind wings testaceous. Length of the body 3½ lines; of the wings 8 lines.

a. Honduras. From Mr. Dyson's collection.

4. SEMYRA QUADRATA.

Mas. *Ferrugineo-cervina; alæ anticæ nigro conspersæ, fasciaque obliqua incompleta subobsoleta, cinerascente.*

Male. Ferruginous fawn colour, a little paler beneath. Antennæ testaceous. Fore wings minutely, thinly, and indistinctly flecked with black, and with a very indistinct oblique and incomplete grayish band. Length of the body 4 lines; of the wings 12 lines.

This species is somewhat different from the two preceding in structure.

a. Venezuela. From Mr. Dyson's collection.

5. SEMYRA? ERIOPHORA.

Albida; antennæ usque ad apices mediocriter pectinatæ; alæ anticæ gutta basali fusca fasciaque obliqua cervina fusco marginata; posticæ apud discum cinereæ.

Phalæna-Bombyx eriophora, *Anon, Ins. Surin.* i. pl. 21.

Surinam.

Genus 23. NYSSIA.*

Corpus robustum, pilosum. Proboscis non conspicua. Palpi porrecti, validi, pilosi, caput superantes; articulus 3us minutus, breviconicus. Abdomen alas posticas non aut vix superans. Pedes validi, usque ad tarsorum apices late ciliati; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ mediocriter latæ; anticæ apud costam subrectæ, apice subrotundatæ, margine exteriore obliquo subconvexo. *Mas.*—Antennæ serratæ; basi sat late pectinatæ, corporis dimidio paullo longiores. *Fœm.*—Antennæ simplices, corporis dimidio non longiores. Alæ latiores.

* Nom bis lectum.

Body stout, pilose; the hairs flat. Proboscis very short or obsolete. Palpi porrect, stout, pilose, extending beyond the head; second joint very much more than twice the length of the first; third minute, short, conical. Abdomen hardly extending as far as the hind wings, or somewhat beyond them. Legs, including the tarsi, stout, deeply ciliated; hind tibiæ with two small apical spurs. Wings moderately broad. Fore wings almost straight along the costa, slightly rounded at the tips, oblique and very slightly convex along the exterior border; second inferior vein about four times further from the third than from the first; third more than twice further from the fourth than from the second. *Male.*—Antennæ rather deeply pectinated for about one-fourth of the length from the base, serrated from thence to the tips, rather more than half the length of the body. *Female.*—Antennæ simple, not more than half the length of the body. Wings rather broader than those of the male; exterior border less oblique.

South America.

A. Alæ anticæ flavo guttatæ. - - - trimacula, *Anon.*
B. Alæ anticæ immaculatæ. - - - - fumosa, *Walk.*
C. Alæ anticæ argenteo variæ. - - - argentata, *Walk.*
D. Alæ anticæ fascia flava. - - - - Plugma, *Anon.*
E. Alæ anticæ linea albida. - - - - vidua, *Anon.*
F. Alæ anticæ nigro strigatæ et unifasciatæ. - dicolon, *Anon.*

1. NYSSIA TRIMACULA.

Mas et fœm. *Rufo-fusca; abdomen et alæ posticæ pallidiora; alæ anticæ macula trigona lituraque flavido-albis.*

Phalæna-Bombyx trimacula, *Anon, Ins. Surin.* i. pl. 45.

Dark reddish brown. Abdomen and hind wings pale reddish brown. Fore wings glossy, with a yellowish white triangular spot in the disk at one-fourth of the length, and an oblique subclavate yellowish white mark near the costa at two-thirds of the length; under side pale reddish brown. *Male.*—Antennæ testaceous. *Female.*—Antennæ reddish brown. Length of the body 7—8 lines; of the wings 16—22 lines.

Var. β. Fore wings with two yellowish white dots instead of the mark, the one behind the other.

a. Parà. From Mr. Bates' collection.
b. Brazil. Presented by W. W. Saunders, Esq.
c, *d*. Brazil. Presented by E. Doubleday, Esq.
e, *f*. Brazil. From Mr. Stevens' collection.
g. Parà. Presented by Gordon Graham, Esq.
h, *i*. Brazil. From Mr. Mornay's collection.

2. NYSSIA FUMOSA.

Mas. *Nigro-fusca ; abdomen ferrugineum ; pedes subtus ferruginei ; alæ anticæ nitentes, vitta irregulari subobsoleta discali gracillima albida, subtus ferrugineæ ; posticæ pallide fuscæ.*

Male. Blackish brown. Abdomen ferruginous. Legs ferruginous beneath. Fore wings glistening, with an indistinct irregular and very slender whitish discal stripe; under side ferruginous. Hind wings pale brown. Length of the body 9 lines; of the wings 16 lines.

a. Parà. From Mr. Stevens' collection.

3. NYSSIA ARGENTATA.

Mas. *Rufa ; caput et thorax flavo varia ; abdomen vitta lata ventrali testacea ; alæ anticæ fasciis duabus angustis obliquis argenteis vittaque lata costali fusca ; posticæ fuscæ.*

Male. Red. Head and fore part of the thorax bright yellow, partly luteous. Palpi partly yellow. Pectus mostly yellow. Abdomen beneath with a broad testaceous stripe. Legs partly clothed with yellow hairs. Fore wings with two slender oblique silvery bands; the first band beyond the middle and slightly undulating, the second marginal; the wing between partly clothed with yellow hairs; a broad brown stripe along the costa; under side pale testaceous, brownish in front. Hind wings brown; under side like that of the fore wings. Length of the body 7 lines; of the wings 15 lines.

a. Brazil. From Mr. Stevens' collection.

4. NYSSIA? PLUGMA.

Nigro-fusca ; alæ anticæ fascia obliqua media antice guttulari guttisque marginalibus flavis ; posticæ basi pallide fuscæ.

Phalæna-Bombyx Plugma, *Anon*, *Ins. Surin.* ii. pl. 84.

Surinam.

5. NYSSIA? VIDUA.

Nigro-fusca; alæ anticæ linea valde obliqua et angulata albida; posticæ sordide cervinæ.

Phalæna-Bombyx vidua, *Anon, Ins. Surin.* i. pl. 6.

Surinam.

6. NYSSIA? DICOLON.

Fusca; alæ anticæ nigro strigatæ, fascia obliqua exteriore nigra albido guttata, macula postica flava; posticæ pallidiores.

Phalæna-Bombyx dicolon, *Anon, Ins. Surin.* ii. pl. 83.

Surinam.

Africa.

7. NYSSIA PICTA.

Prasina; caput subtus, palpi antennæque ferruginea; pectus et abdomen fulva aut testacea; pedes fulvi; alæ anticæ ferrugineæ aut fuscæ, vitta costali fasciaque interrupta et nonnumquam obsoleta prasinis; posticæ testaceæ.

Grass-green. Head beneath, palpi and antennæ ferruginous. Pectus and abdomen tawny or testaceous. Legs tawny. Fore wings ferruginous, grass-green along the costa, and with an oblique and widely interrupted grass-green band beyond the middle; under side and hind wings testaceous. Length of the body 6—7 lines; of the wings 15—18 lines.

Var. β. Fore wings brown, with no green band; under side of the four wings tawny.

a—*c*. Sierra Leone. Presented by the Rev. D. F. Morgan.

Madagascar.

8. NYSSIA FLORIFERA.

Ferrugineo-rufa; caput supra et thorax antice alba; antennæ nigræ; thorax postice et abdomen fulva; pedes antici fulvo vittati; alæ anticæ fascia discali obliqua e maculis tribus albis duabusque viridibus; posticæ flavescentes, ferrugineo marginatæ.

Nyssia florifera, *Herr.-Schæff. Lep. Exot. Sp. Ser.* i. f. 178.

Ferruginous-red. Head above and thorax in front white. Antennæ black. Hind part of the thorax and abdomen tawny. Fore legs with tawny stripes. Fore wings before the middle with a short discal oblique band, which consists of three white and two bright green spots, the latter intersecting the former; under side yellowish towards the base. Hind wings yellowish; costa and exterior margin with a ferruginous-red border, which is broadest in the male. Length of the body 8—11 lines; of the wings 18—25 lines.

a, *b*. Madagascar. From M. Becker's collection.
c. Madagascar. Presented by E. Doubleday, Esq.

East Indies.

A. Alæ anticæ totæ fuscæ. - - - - herbifera, *Walk.*
B. Alæ anticæ viridi aut flavo fasciatæ.
A. Alæ posticæ fuscæ. - - - - latifascia, *Walk.*
B. Alæ posticæ albidæ.
a. Alæ anticæ basi fuscæ. - - - - læta, *Westw.*
b. Alæ anticæ basi virides. - - - varia, *Walk.*

9. Nyssia herbifera.

Mas. *Ferruginea; caput supra et thorax antice prasina, vitta dorsali ferruginea; alæ anticæ apices versus fuscæ, macula magna prasina apud marginem interiorem; posticæ fuscæ, subtus ferrugineæ.*

Male. Ferruginous. Vertex of the head and fore part of the thorax grass-green, with a ferruginous middle stripe. Fore wings brown towards the tips, and with a large grass-green spot on the middle of the interior border. Hind wings brown, ferruginous beneath. Length of the body 5 lines; of the wings 12 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.

10. Nyssia latifascia.

Mas. *Cervina, argenteo subvaria; caput flavo bivittatum; thorax flavus, cervino varius; abdomen argenteo subfasciatum; alæ anticæ fascia obliqua latissima flava.*

Male. Fawn-colour, here and there slightly silvery. Head with two yellow stripes on the vertex. Thorax yellow, fawn-colour hindward and on each side in front. Abdomen with indistinct silvery bands. Fore wings with an oblique and very broad yellow band, which occupies the costa from a little beyond one-third to three-fourths of the length of the wing, and extends along the basal half of the interior border, and forms a nearly right angle on its basal side. Length of the body 5½ lines; of the wings 14 lines.

a. Nepaul. Presented by Major-Gen. Hardwicke.

11. NYSSIA LÆTA.

Mas. *Prasina; caput antice, palpi, antennæ, pectus et pedes fusca; thorax antice albidus; abdomen albido-testaceum, vitta apiceque fuscis; alæ anticæ fuscæ, fascia perobliqua prasina guttaque interiore alba; posticæ testaceæ, fusco marginatæ.*

Limacodes læta, *Westw. Cab. Orient. Ent.* 50.

Male. Grass-green. Head in front, palpi, antennæ, pectus and legs brown. Thorax whitish in front. Abdomen whitish testaceous; stripe and tip brown. Fore wings brown, with a very oblique grass-green band, which is indented on each side in the middle, and is much narrower than that of the three preceding species; a white spot in the disk between the band and the base of the wing; under side paler. Hind wings testaceous, with brownish borders. Length of the body 5 lines; of the wings 11 lines.

a. Ceylon. Presented by R. Templeton, Esq.

12. NYSSIA VARIA.

Mas. *Testacea; alæ anticæ ferrugineo fasciatim conspersæ, apices versus fuscæ viridi variæ, basi vittaque postica viridibus; posticæ fusco marginatæ.*

Male. Testaceous. Antennæ tawny. Fore wings with ferruginous flecks, which form zigzag transverse lines, green at the base, and with an irregular green stripe near the interior border, brown varied with green towards the tips. Hind wings with brown borders. Length of the body 5 lines; of the wings 12 lines.

a. ——? Presented by E. Doubleday, Esq.

Country unknown.

13. NYSSIA RUFESCENS.

Mas et fœm. *Ferrugineo-rufa; abdomen fulvum; alæ anticæ nitentes, subtus posticæque totæ testaceæ.* Mas.—*Alæ anticæ vitta discali fuscescente; posticæ apud marginem interiorem fulvæ.*

Male and female. Ferruginous-red. Abdomen tawny. Fore wings shining, testaceous beneath. Hind wings testaceous. *Male.*—Fore wings with a brownish discal stripe. Hind wings tawny along the interior border. Length of the body 7—8 lines; of the wings 16—20 lines.

In the collection of Mr. Saunders.

Genus 24. NEÆRA.*

Corpus robustum. Proboscis non conspicua. Palpi validi, porrecti, pilosi, caput paullo superantes; articulus 3us conicus, minimus. Abdomen alas posticas non superans. Pedes validi, dense pilosi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ latæ, non longæ; anticæ apud costam fere rectæ, apice rotundatæ, margine exteriore obliquo vix convexo. *Mas.*—Antennæ serratæ, triente basali mediocriter pectinatæ. *Fœm.*—Antennæ simplices.

Neæra, *Herr.-Schæff. Lep. Exot. Ser.* 1.
Limacodes, p., *Westw.*

Body stout. Proboscis not visible. Palpi stout, porrect, pilose, extending a little beyond the head; third joint conical, very minute. Abdomen extending as far as the hind wings. Legs stout, densely pilose; hind tibiæ with two minute apical spurs. Wings broad, not long. Fore wings nearly straight along the costa, rounded at the tips, oblique and very slightly convex along the exterior border; interior angle rounded; first, second and third inferior veins nearly equidistant from each other; fourth more remote. *Male.*—Antennæ moderately pectinated to a little beyond one-third of the length, serrated from thence to the tips. *Female.*—Antennæ simple.

NOTE.—*N. bicolor* differs somewhat in structure from the other species of the genus; its fore wings being hardly oblique along the exterior border.

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* Nom bis lectum.

East Indies.

A. Alæ anticæ basi fuscæ.
A. Alæ anticæ fascia viridi.
a. Alæ anticæ costa basi fusca.
a. Alæ anticæ fascia marginali fusca lata.
i. Alæ anticæ fascia marginali fusca apud medium dilatata. - - - - - media, *Walk.*
ii. Alæ anticæ fascia marginali non dilatata. graciosa, *Westw.*
b. Alæ anticæ fascia marginali fusca angusta. chloris, *Herr.-Schæff.*
c. Alæ anticæ margine angusto fusco. - punica, *Boisd.*
B. Alæ anticæ costa basi viridi. - - latistriga, *Walk.*
B. Alæ anticæ fascia flava. - - - - repanda, *Walk.*
B. Alæ anticæ basi virides. - - - - bicolor, *Walk.*
C. Alæ anticæ testaceæ, fusco bilineatæ. - - bilinea, *Walk.*

1. Neæra graciosa.

Prasina; caput ex parte, palpi, antennæ, pectus, abdomen et pedes fusca; thorax fusco vittatus; alæ anticæ ferrugineo-fuscæ fascia obliqua latissima prasina extus fusco marginata; posticæ fuscæ basi testaceæ.

Limacodes graciosa, *Westw. Cab. Orient. Ent.* 50, pl. 24, f. 4.

Grass-green. Head brown in front, and with a vertical brown stripe. Palpi, antennæ, pectus, abdomen and legs brown. Thorax with a brown stripe, which widens hindward. Fore wings ferruginous-brown, with a very broad and oblique grass-green band, which occupies the middle half of the costa, and the basal half of the inner border; the wings have brown veins and ciliæ, and they are wholly brown on the basal side of the band, which is bordered with brown on its outer side; under side with a large testaceous triangular discal spot. Hind wings brown, testaceous above towards the base. Length of the body 5—8 lines; of the wings 11—20 lines.

Var. β. Fore wings green beneath, with the exception of a broad brown band along the outer border. Hind wings whitish, with pale brownish borders.

a, b. Ceylon. Presented by R. Templeton, Esq.
c. North India. From Mr. Stevens' collection.

2. Neæra media.

Prasina; caput ex parte, palpi, antennæ, pectus et pedes fusca; thorax fusco vittatus; abdomen testaceum; alæ anticæ cervinæ, basi fuscæ, fascia latissima perobliqua prasina fusco marginata extus indentata; posticæ testaceæ, fusco marginatæ.

Grass-green. Head brown in front, and with a vertical brown stripe. Palpi, antennæ, pectus and legs brown. Thorax with a brown stripe, which widens hindward. Abdomen testaceous. Fore wings fawn-colour, with a very broad and oblique grass-green band, which occupies the greater part of the costa and more than the basal half of the inner border; it is indented in the middle of its outer side, a character whereby this species differs from *N. graciosa*; the wings have brown veins and ciliæ, and are wholly brown between the base and the green band, which has a brown border on the outer side; under side grass-green, fawn-colour along the costa and along the outer border. Hind wings pale testaceous, with brownish borders. Length of the body 4—5 lines; of the wings 10—13 lines.

a, b. Java. From the East India Company's collection.
c. ———?
d. Pupa. Java. From the East India Company's collection.

3. Neæra chloris.

Prasina; caput antice, palpi, antennæ, pectus et pedes ferruginea; abdomen testaceum; alæ anticæ cervinæ, fascia latissima perobliqua prasina fusco marginata extus undulosa intus excavata; posticæ cervinæ aut testaceæ.

Neæra chloris, *Herr.-Schæff. Lep. Exot. Ser.* 1, f. 176.

Grass-green. Head in front, palpi, antennæ, pectus and legs ferruginous. Abdomen testaceous. Fore-wings fawn-colour, with a very broad and oblique grass-green band, which occupies about half of the costa and much more than the basal half of the inner border; this band is bordered with brown; its outer border is undulating, and its inner border is excavated, a character whereby *N. chloris* differs from the two preceding species; wings brownish at the base and with brownish ciliæ; under side testaceous. Hind wings fawn-colour, testaceous beneath or wholly testaceous. Length of the body 4—4½ lines; of the wings 10—11 lines.

a, b. ———? From Mr. Milne's collection.

4. NEÆRA PUNICA.

Fœm. *Prasina; abdomen luteum; alæ anticæ basi fusca luteo marginata, fascia arcuata albida, margine exteriore fusco; posticæ albidæ, fusco marginatæ.*

Neæra punica, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 177.

Female. Bright grass-green. Abdomen luteous. Fore wings with the basal fourth part brown, which colour is bordered by a luteous band; a much curved whitish band at half the distance between the latter and the brown apical and exterior border. Hind wings whitish, with pale brown borders.

Silhet.

5. NEÆRA LATISTRIGA.

Fœm. *Prasina, subtus fulva; abdomen fulvum; alæ anticæ vitta brevi lata basali fasciaque lata exteriore intus fusco marginata testaceis; posticæ testaceæ.*

Female. Grass-green, tawny beneath. Abdomen tawny. Fore wings with a short broad testaceous or very pale brown stripe, extending from the hinder part of the base to one-fourth of the length of the wing; a broad testaceous band along the exterior border divided by a brown line from the green part; under side and hind wings testaceous. Length of the body 6 lines; of the wings 16 lines.

a. ——— ?

6. NEÆRA REPANDA.

Fœm. *Pallide viridi-flava; caput ex parte, palpi, antennæ, pectus, abdomen et pedes ferrugineo-fusca; alæ anticæ fascia lata marginali ferrugineo-fusca argenteo intus marginata, maculaque magna basali obscure fusca; posticæ flavescentes ferrugineo-fusco late marginatæ.*

Female. Pale greenish yellow. Head in front, on each side and beneath, palpi, antennæ, pectus, abdomen and legs ferruginous-brown. Fore wings with a broad marginal ferruginous-brown band, which is divided from the yellow part by a slender but diffuse silvery white band; a large dark brown basal spot occupying one-fourth of the length and half the breadth of the wing; under side and hind wings yellowish, with broad diffuse ferruginous-brown borders. Length of the body 8 lines; of the wings 20 lines.

a. North India. From Mr. L. James' collection.

7. Neæra bicolor.

Mas. *Prasina; caput ex parte, palpi, antennæ, pectus, abdomen, pedes et alæ posticæ fulva; alæ anticæ apud costam fulvæ, macula disculi guttisque exterioribus fuscis.*

Male. Grass-green. Head in front and beneath, palpi, antennæ, pectus, abdomen, legs and hind wings brownish tawny. Fore wings tawny along the costa; a brown spot in the disk at two-thirds of the length, and three or four brown dots along the outer border; under side brownish tawny in front, whitish green hindward. Length of the body 5 lines; of the wings 12 lines.

a. North India. From Mr. L. James' collection.
b. East Indies. From Archdeacon Clerk's collection.

8. Neæra bilinea.

Mas et fœm. *Testacea; caput et thorax antice fulva; alæ anticæ fasciis duabus obliquis gracillimis fulvis.*

Male and female. Testaceous. Head and fore part of the thorax tawny. Fore wings with two oblique very slender tawny bands, which approach each other towards the costa. Hind wings rather paler than the fore wings. Length of the body 4—5 lines; of the wings 10—13 lines.

a. China. Presented by G. T. Lay, Esq.

9. Neæra? hilaris.

Fœm. *Caput, thorax mediaque alarum anticarum pallide viridia, harum basi apiceque fulvo sericeis, strigis ciliisque obscurioribus; alæ posticæ stramineæ ciliis fuscis.*

Limacodes hilaris, *Westw. Cab. Orient. Ent.* 50, pl. 24, f. 3.

Central India.

South America.

9. Neæra? viridiplena.

Mas. *Læte prasina; caput antice, palpi, antennæ et pedes ferruginea; antennæ latissime pectinatæ, apice simplices; pectus et abdomen pallide testacea; alæ anticæ margine exteriore maculaque basali fuscis; posticæ pallide testaceæ.*

Male. Bright grass-green. Head in front, palpi, antennæ and legs ferruginous. Antennæ very deeply pectinated to beyond

five-sixths of the length, simple from thence to the tips. Pectus and abdomen pale testaceous, the latter pale ferruginous beneath towards the base. Fore wings brown along the exterior border, the brown part forming two curves on its inner side; a brown spot at the base of the costa, occupying one-fourth of the length and one half of the breadth of the wing. Hind wings pale testaceous; a little darker about the border. Length of the body 4½—5 lines; of the wings 13—14 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 25. EUCLEA.

Mas et fœm. Corpus sat robustum. Proboscis non conspicua. Palpi porrecti, sat validi, caput paullo superantes; articulus 3us conicus, acutus. Antennæ thorace paullo longiores. Abdomen alas posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor breviusculis. Alæ sat latæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore obliquo, angulo interiore rotundato. *Mas.*—Antennæ mediocriter pectinatæ, dimidio apicali simplices. *Fœm.*—Antennæ simplices.

Euclea, p., *Hübn. Verz. Schmett.* 149.
Limacodes, p., *Duncan; Herr.-Schæff.*

Male and female. Body rather stout. Proboscis not visible. Palpi porrect, rather stout, extending a little beyond the head; third joint conical, acute. Antennæ a little longer than the thorax. Abdomen extending as far as the hind wings. Legs stout, pilose; hind tibiæ with four rather short spurs. Wings moderately broad. Fore wings nearly straight along the costa, rounded at the tips, oblique along the exterior border; interior angle rounded; second inferior vein rather further from the third than from the first. *Male.*—Antennæ moderately pectinated to nearly half the length, simple from thence to the tips. *Female.*—Antennæ simple.

1. Euclea Cippus.

Mas. *Fusco-rufa; alæ anticæ fascia arcuata liturisque nonnullis obscure fuscis, necnon maculis duabus viridibus duabusque rufis.*

Bombyx Cippus, *Cram. Pap. Exot.* i. 84, pl. 53, f. E. *Fabr. Sp. Ins.* ii. 189, 87; *Mant. Ins.* ii. 121, 119. *Gmel. ed. Syst. Nat.* i. 5, 2427, 549. *Abbot & Smith, Nat. Hist. Lep. Ins. Georgia,* ii. pl. 13. *Oliv. Enc. Méth.* v. 72, 163.

Limacodes Cippus, *Duncan, Nat. Libr.* xxxvii. *Exot. Moths,* 177, pl. 21, f. 1, 2.

Euclea Cippe, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Rotundatæ*) 149, 1565.

Limacodes Querceti, *Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 174.

Brownish red. Fore wings with a curved dark brown band beyond two-thirds of the length, and with some dark brown marks nearer the base; each wing with two green spots, which are divided on the outer side by a white and a black border from two red spots; fore green spot transverse, much smaller than the hind one, which is longitudinal and attenuated at its tip. Hind wings with testaceous borders, and with a dark brown spot on the interior angle.

North and South America.

a, *b*. Georgia. From Mr. Milne's collection.
c, *d*. ———?

2. Euclea Quercicola.

Fœm. *Fusco-rufa; alæ anticæ fascia arcuata maculisque duabus discalibus obscure fuscis, necnon maculis duabus viridibus duabusque rufis.*

Limacodes Quercicola, *Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 175.

Female. Brownish red. Fore wings with a curved dark brown band beyond two-thirds of the length, and with two dark brown discal spots nearer the base; each wing with two small green spots, which are contiguous on the outer side to two larger red spots; fore green spot transverse; hind one triangular. Hind wings rather paler than the fore wings.

Georgia.

3. Euclea viridiclava.

Mas. *Ferruginea; alæ anticæ gutta discali fusca vittaque posteriore prasina subclavata, antice concava, postice incisa alboque marginata; posticæ pallide cervinæ.*

Male. Ferruginous. Fore wings with a brown discal dot, behind which there is a bright grass-green somewhat clavate stripe, which is slightly concave on its fore side, and is deeply notched and bordered with white on its hind side; under side and hind wings pale fawn-colour. Length of the body 4 lines; of the wings 12 lines.

a. ———?

Genus 26. SURIDA.

Mas. Corpus robustum. Proboscis non conspicua. Palpi validi, porrecti, longiusculi, caput superantes; articulus 3us parvus, longi-conicus, acutus. Antennæ mediocriter pectinatæ. Abdomen alas posticas non superans. Pedes validi, pilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subangulatæ, margine exteriore obliquo, angulo interiore rotundato.

Male. Body stout. Proboscis obsolete. Palpi stout, porrect, rather long, extending beyond the head; first joint short; third small, elongate-conical, acute. Antennæ moderately pectinated; the branches longest in the middle part. Abdomen extending as far as the hind wings. Legs stout, pilose; hind tibiæ with four rather long spurs. Wings moderately broad. Fore wings straight along the costa, almost angular at the tips, oblique along the exterior border; interior angle rounded; second inferior vein much nearer to the first than to the third; third as far from the second as from the fourth.

1. SURIDA INCISA.

Mas. *Ferrugineo-fusca; alæ anticæ fascia undulosa nigricante albido ex parte marginata, lituraque discali argentea subclavata.*

Male. Ferruginous-brown. Fore wings with a blackish undulating stripe in front of the middle, partly bordered with white; a silvery transverse subclavate mark in the disk near the base; under side with a whitish subapical lunule. Length of the body 4 lines; of the wings 10 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 27. LIMACODES.

Corpus sat validum, aut gracile. Proboscis non conspicua. Palpi porrecti, graciles, caput paullo superantes; articulus 3us parvus, acutus. Antennæ simplices aut fere simplices, thorace paullo longiores. Abdomen alas posticas non superans. Pedes graciles aut sat validi; tibiæ posticæ calcaribus quatuor sat longis. Alæ mediocriter latæ; anticæ apud costam subconvexæ, apice rotundatæ, margine exteriore subobliquo, angulo interiore rotundato.

Limacodes, *Latr. Fam. Nat.; Steph. Ill. Brit. Ent. Haust.* ii. 85; *Boisd.*
Bombyx, p., *Fabr.*
Tortrix, p., *Hübn.*
Heterogenea, *Knoch, Beitr.* iii. 63; *Treits.; Steph. Ill. Brit. Ent. Haust.* ii. 84.
Hepialus, p., *Fabr.; Wien. Verz.*
Phalæna, p., *Donov.; Stew.*
Apoda, *Haw.*

Body moderately stout, slender in some species. Proboscis not visible. Palpi porrect, slender, extending a little beyond the head; third joint small, acute. Antennæ simple, or nearly so, in both sexes, a little longer than the thorax. Abdomen extending as far or nearly as far as the hind wings. Legs moderately stout or slender, pilose or nearly bare; hind tibiæ with four rather long spurs. Wings moderately broad. Fore wings slightly convex along the costa, rounded at the tips, slightly oblique along the exterior border; interior angle rounded; second inferior vein a little further from the third than from the first; third a little further from the fourth than from the second.

This genus requires subdivision.

Europe.

A. Pedes sat validi. - - - - - Testudo, *Fabr.*
B. Pedes graciles, vix pilosi. - - - - Asellus, *Fabr.*

1. Limacodes Testudo.

Alæ fulvæ, aut ferruginea, strigis duabus obliquis obscurioribus.

Limacodes Testudo, *Latr. Steph. Ill. Brit. Ent. Haust.* ii. 86, 1. *Westw. & Humph. Brit. Moths*, i. 81, pl. 16, f. 5—7.
Hepialus Testudo, *Fabr. Ent. Syst.* iii. 2, 7, 8.
Bombyx Testudo, *Fabr. Mant. Ins.* ii. 121, 116. *Wien. Verz.* 65, 1. *Gmel. ed. Syst. Nat.* i. 5, 2427, 546. *Oliv. Enc. Méth.* v. 71, 160.
Bombyx Limacodes, *Esp. Schmett.* iii. 140, pl. 26, f. 3—9.
Phalæna Limax, *Borkh. Eur. Schmett.* iii. 449.
Bombyx Asella? *Esp. Schmett.* iii. *Suppl.* 36, pl. 85, f. 4.
Bombyx sulphurea, *Fabr. Sp. Ins.* ii. 189, 86.
Tortrix testudinana, *Hübn. Tort.* pl. 26, f. 164, 165.
Phalæna funalis, *Donov. Nat. Hist. Brit. Ins.* iii. pl. 76. *Stew. El.* ii. 195.

——— ———, *Albin, Nat. Hist. Engl. Ins.* pl. 67, f. c—g. *Wilkes*, 43, pl. 88.
Bombyx Bufo, *Fabr. Mant. Ins.* ii. 121, 118. *Gmel. ed. Syst. Nat.* i. 5, 2427, 548. *Oliv. Enc. Méth.* v. 71, 162.
Hepialus Bufo, *Fabr. Ent. Syst.* iii. 2, 7, 10.

a—k. England. From Mr. Stephens' collection.
l—m. England.
n—p. Europe. From M. Becker's collection.
q. ———?

2. LIMACODES ASELLUS.

Alæ luteo-fuscescentes; posticæ saturatiores.

Heterogenea Asellus, *Steph. Ill. Brit. Ent. Haust.* ii. 85, 1, pl. 17, f. 2.
Bombyx Asellus, *Fabr. Mant. Ins.* ii. 121, 117. *Gmel. ed. Syst. Nat.* i. 5, 2427, 547. *Wien. Verz.* 65, 2. *Oliv. Enc. Méth.* v. 71, 161.
Heterogenea cruciata, *Knoch, Beitr.* iii. 63, pl. 3.
Hepialus Asellus, *Fabr. Ent. Syst.* iii. 2, 7, 9.

a. England. From Mr. Stephens' collection.

North America.

A. Alæ fasciatæ.
A. Alæ posticæ fuscæ. - - - - spinuloides, *Boisd.*
B. Alæ posticæ pallidæ.
a. Alæ anticæ albo nigroque variæ.
a. Alæ anticæ macula apicali alba. - fasciola, *Boisd.*
b. Alæ anticæ non maculatæ. - - - textula, *Boisd.*
b. Alæ anticæ cinereo bifasciatæ. - - pallida, *Boisd.*
B. Alæ non fasciatæ. - - - - - flavula, *Boisd.*

3. LIMACODES? SPINULOIDES.

Ferruginea; alæ anticæ macula oblonga discali guttisque marginalibus nigris, strigaque brevi costali subapicali alba; posticæ pallide fuscæ. Mas.—*Alæ anticæ fasciis duabus obliquis fuscis.* Fœm.—*Alæ anticæ ex parte albidæ.*

Limacodes spinuloides, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 187, 188.

Ferruginous. Fore wings with an oblong black discal spot, a row of black marginal dots, and a short white costal subapical

streak. Hind wings pale brown, with very pale borders. *Male.*—Antennæ slightly pectinated. Fore wings with two oblique brown bands, which are connected by the interior border. *Female.*—Antennæ simple. Fore wings dingy whitish along the costa near the base, with an oblique dingy whitish band which includes the black discal spot, with a short oblique white streak resting on the interior border, and with a short subapical band of black dots.

North America.

4. LIMACODES? FASCIOLA.

Mas. *Cervina; alæ anticæ rufescentes fascia subobliqua alba postice furcata antice hamata, macula apicali alba, fasciaque nigricante; posticæ testaceæ.*

Limacodes fasciola, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 186.

Male. Fawn-colour. Antennæ hardly pectinated. Fore wings reddish, with a slightly oblique white band, which is forked behind and hooked in front, with a white apical spot, and with a blackish band which proceeds from the hook of the white band. Hind wings testaceous.

North America.

5. LIMACODES? TEXTULA.

Fœm. *Pallide cervina; alæ fasciis abbreviatis transversis albidis nigro ex parte marginatis.*

Limacodes textula, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 184.

Female. Pale fawn-colour. Wings with abbreviated transverse whitish bands, whose borders are partly blackish.

North America.

6. LIMACODES? PALLIDA.

Testacea; alæ anticæ fasciis duabus arcuatis angustis discalibus cinereis.

Testaceous. Antennæ nearly simple. Abdomen extending as far as the hind wings. Fore wings with two curved gray slender discal bands.

North America.

7. Limacodes? flavula.

Mas. *Pallide cervina; alæ anticæ cervinæ; posticæ albidæ.*

Limacodes flavula, *Boisd. Herr.-Schæff. Lep. Exot. Sp. Ser.* 1, f. 185.

Male. Pale fawn-colour. Antennæ simple. Fore wings fawn-colour. Hind wings whitish.

a, *b*. Nova Scotia. From Lieut. Redman's collection.

South America.

A. Alæ anticæ ferrugineo-testaceæ. - - undifera, *Walk.*
B. Alæ anticæ fuscæ, nigro variæ. - - - Æmilia, *Caam.*

8. Limacodes undifera.

Mas. *Fulva; thoracis latera apud alas anticas ferruginea; alæ anticæ antice ferrugineæ, postice testaceæ, linea media valde arcuata.*

Male. Tawny. Antennæ whitish testaceous. Thorax ferruginous on each side by the base of the fore wing. Fore wings dark ferruginous, with a deeply undulating testaceous hind band, which is dilated and whitish in front towards the base of the wing. Hind wings paler ferruginous. Length of the body 4—5 lines; of the wings 10—14 lines.

a. Honduras.
b. ———? From Mr. Miller's collection.

9. Limacodes? Æmilia.

Fusca; alæ albo ciliatæ, anticæ nigro marginatæ, macula discali fasciisque duabus fuscis, gutta subcostali alba maculisque duabus posticis, una rufa, altera flava.

Phalæna-Bombyx Æmilia, *Cram. Pap. Exot.* iv. 230, pl. 397.
Euclea Æmilia, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Rotundatæ*) 149, 1564.

Surinam.

Africa.

10. LIMACODES? ARENACEA.

Lutea; alæ anticæ supra atomis nigris adspersæ.

Bombyx arenacea, (*Drury, Ins.* i. 33, pl. 18, f. 1). *Linn. Syst. Nat.* i. 2, 828, 65. *Gmel. ed. Syst. Nat.* i. 5, 2432, 65.
Limacodes? arenacea, *Westw. ed. Drury*, i. 32, pl. 18, f. 1.

Cape.

Asia.

A. Alæ ferrugineo-fuscæ. - - - - conjuncta, *Walk.*
B. Alæ fulvæ, anticæ apice ferrugineæ. - - apicalis, *Walk.*

Asia.

11. LIMACODES? CONJUNCTA.

Mas. *Ferrugineo-fusca, robusta, subtus pallidior; antennæ subserratæ; alæ anticæ gutta discali fasciaque lata undulosa exteriore fuscis.*

Male. Ferruginous-brown, stout, paler beneath. Antennæ minutely serrated. Fore wings with a dark brown discal dot, beyond which there is a broad undulating brown band, which has darker borders. Hind wings a little paler than the fore wings. Length of the body 6 lines; of the wings 14 lines.

a. North China. From Mr. Fortune's collection.

12. LIMACODES APICALIS.

Fœm. *Cervina, robusta; palpi ferruginei; antennæ albidæ; pedes validi, antici fusci; alæ apices versus ferrugineæ albido marginatæ.*

Female. Fawn-colour. Body stout. Palpi ferruginous. Antennæ whitish, simple. Abdomen not extending so far as the hind wings. Legs stout; fore legs mostly brown; hind tibiæ with two small apical spurs. Fore wings with the apical third part ferruginous; the space occupied by the above hue oval, and with a whitish border. Length of the body 4½ lines; of the wings 13 lines.

Silhet. In Mr. Saunders' collection.

Country unknown.

13. LIMACODES SEMIFASCIA.

Mas. *Ferruginea; abdomen et alæ posticæ fulva; alæ anticæ fascia obliqua argentea antice abbreviata extus indentata.*

Male. Ferruginous. Abdomen and hind wings tawny. Fore wings with a silvery white oblique band extending from before the middle of the interior border to the disk, indented on its outer side. Length of the body 4 lines; of the wings 6 lines.

a. ——— ?

Genus 28. NAROSA.

Mas. Corpus gracile. Proboscis non conspicua. Palpi longi, graciles, ascendentes, caput superantes; articulus 3us lanceolatus. Antennæ simplices, graciles, thorace multo longiores. Pedes graciles; tibiæ tarsique late ciliata; tibiæ posticæ calcaribus quatuor longiusculis. Alæ latæ, breviusculæ; anticæ late ciliatæ, apud costam convexæ, apice rotundatæ.

Male. Resembles the *Pyralites*. Body slender. Proboscis not visible. Palpi long, slender, ascending, extending beyond the head; third joint lanceolate, about one-fourth of the length of the second. Antennæ simple, slender, much longer than the thorax. Abdomen not extending so far as the hind wings. Legs slender; tibiæ and tarsi deeply ciliated; hind tibiæ with four rather long spurs. Wings broad, rather short. Fore wings convex in front, rounded at the tips, rather deeply ciliated; interior angle rounded; subcostal vein emitting two branches in front, forked near its tip; two superior veins; discal areolet intersected by a secondary vein; first and second inferior veins nearly contiguous at the base; third rather further from the fourth than from the second.

1. NAROSA CONSPERSA.

Mas. *Albido-testacea; thorax lituris nonnullis ochraceo-ferrugineis; alæ anticæ fasciis ochraceo-ferrugineis ex parte fusco conspersis.*

Male. Whitish testaceous. Thorax with some orange-ferruginous marks. Wings shining; veins beneath with shining scales. Fore wings with seven or eight incomplete orange-ferruginous bands, some of them with brown speckles. Length of the body 3½—4 lines; of the wings 8—9 lines.

a, *b*. Ceylon. Presented by R. Templeton, Esq.
c—*d*. (Pupa.) Presented by R. Templeton, Esq.

Genus 29. NESARA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi validi, porrecti, pilosissimi, caput paullo superantes; articulus 3us minimus. Antennæ mediocriter pectinatæ, thorace non longiores. Abdomen alas posticas paullo superans. Pedes mediocriter validi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ sat latæ; anticæ apud costam subconvexæ, apice subangulatæ, margine exteriore subobliquo, angulo interiore rotundato.

Male. Body moderately stout. Proboscis not visible. Palpi stout, porrect, very pilose, extending rather beyond the head; third joint very small. Antennæ moderately pectinated, hardly as long as the thorax. Abdomen extending for about one-fourth of its length beyond the hind wings. Legs moderately stout; hind tibiæ with two minute apical spurs. Wings moderately broad. Fore wings slightly convex along the costa, somewhat angular at the tips, slightly oblique along the exterior border; interior angle rounded; first and second inferior veins approximate at the base; third remote.

1. Nesara apicalis.

Mas. *Testacea; alæ anticæ macula apicali guttaque discali fuscis, strigaque brevi lata rufescente; posticæ rufescentes, costa testacea apice fuscescente.*

Male. Testaceous. Fore wings with a brown apical spot, behind which there is a short broad reddish streak which extends to the fringe; a minute brown discal dot. Hind wings reddish, testaceous along the costa, whose tip is partly brownish. Length of the body 6 lines; of the wings 12 lines.

Brazil. In the collection of Mr. Saunders.

Genus 30. NAPRÈPA.

Mas. Corpus robustum. Proboscis non conspicua. Pedes validi, pilosi, brevissimi; articulus 3us minimus. Antennæ late pectinatæ, thorace paullo breviores. Abdomen alas posticas non superans. Pedes validi, breves; femora et tibiæ dense pilosa;

tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ breves; latæ; anticæ apud costam subrectæ, apice subangulatæ, margine exteriore vix obliquo.

Male. Body stout. Proboscis obsolete. Palpi stout, pilose, very short; third joint very small. Antennæ deeply pectinated, a little shorter than the thorax. Abdomen extending as far as the hind wings. Legs stout, short; femora and tibiæ thickly pilose; hind tibiæ with minute apical spurs. Wings short, broad. Fore wings nearly straight along the costa, slightly angular at the tips, very slightly oblique and convex along the exterior border; the four inferior veins almost equidistant from each other. Hind wings a little broader than the fore wings; interior border somewhat convolute, forming an almost right angle with the exterior border.

1. NAPREPA VARIANS.

Mas. *Testacea; abdomen fusco bivittatum, apice subtus albidum; tibiæ tarsique fusca; alæ anticæ maculis costalibus fasciisque duabus angustis undulosis ferrugineis, macula obliqua discali strigaque fuscis; posticæ fuscæ, apud marginem interiorem albo notatæ.*

Male. Testaceous. Abdomen with a brown stripe along each side; tip whitish beneath. Tibiæ and tarsi brown. Fore wings with some ferruginous spots along the costa and along the interior border, with two slender undulating ferruginous bands, and with a brown oblique discal spot, behind which there is a paler brown streak. Hind wings brown, and marked with white along the interior border. Length of the body 4—5 lines; of the wings 10—12 lines.

Var. β. Cinereous.

a, *b*. Ceylon. Presented by R. Templeton, Esq.
c, *d*. Hong Kong. From Mr. Harrington's collection.
e. Hong Kong. Presented by Colonel Champion.

Genus 31. PAMEA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi breves, validi, pilosi, caput non superantes; articulus 3us minimus. Antennæ late pectinatæ, thorace non breviores. Abdomen alas posticas non superans. Pedes validi; tibiæ posticæ calcaribus duobus apicalibus sat longis. Alæ mediocriter latæ; anticæ sæpissime subfalcatæ, margine interiore nonnunquam excavato.

Nearly allied to the *Drepanulidæ*, and perhaps containing two or three distinct genera. *Male.*—Body rather stout. Proboscis not visible. Palpi short, stout, pilose, not extending beyond the head; third joint very small. Antennæ deeply pectinated (moderately pectinated in *P. transiens*), as long as or a little longer than the thorax. Abdomen extending as far or nearly as far as the hind wings. Legs stout; hind tibiæ with two moderately long apical spurs. Wings moderately broad. Fore wings slightly or hardly hooked; interior border excavated in some species; first and second inferior veins approximate at the base; third remote.

South America.

A. Alæ anticæ non excavatæ.
  A. Alæ posticæ non vittatæ. - - - albistriga, *Walk.*
  B. Alæ posticæ vittatæ. - - - - vittata, *Walk.*
B. Alæ anticæ excavatæ.
  a. Alæ anticæ falcatæ. - - - - excavata, *Walk.*
  b. Alæ anticæ vix falcatæ. - - - notata, *Walk.*

1. Pamea albistriga.

Mas. *Cana, fusco conspersa; alæ versus marginem exteriorem fuscum pallidiores, fascia recta obliqua fusca, extus albo marginata, costam versus abrupte flexa.*

Male. Hoary, speckled with brown. Wings paler towards the exterior border, which is brown, with a straight oblique brown band, which is bordered with white on the outer side, and is abruptly bent towards the costa of the fore wings. Fore wings hardly convex along the costa, angular, but hardly hooked at the tips, very slightly undulating along the exterior border; interior angle much rounded; interior border straight, entire; a slight indistinct undulating brown band near the base. Length of the body 6 lines; of the wings 14 lines.

a, *b*. Brazil. From M. Becker's collection.

2. Pamea excavata.

Mas. *Fulva; alæ fascia gracillima subobsoleta obliqua fusca; anticæ subfalcatæ, margine exteriore subrecto, interiore excavato.*

Male. Tawny. Antennæ pale testaceous. Fore wings with a few brown flecks, and a very slender and indistinct oblique brown band, very slightly convex along the costa, acutely angular and slightly hooked at the tips, nearly straight along the exterior border, excavated by the interior angle, and more deeply so on the adjoining part of the interior border; under side with two brown dots, one by the costa, the other in the disk. Hind wings with a band like that of the fore wings. Length of the body 6 lines; of the wings 16 lines.

Brazil. In Mr. Saunders' collection.

3. Pamea notata.

Mas. *Fulva; alæ ferrugineæ; anticæ vix falcatæ, gutta discali fascia exteriore obliqua strigaque subapicali nigricantibus, margine exteriore recto, interiore excavato.*

Male. Tawny. Wings ferruginous. Fore wings straight along the costa, almost acutely angular but hardly hooked at the tips, straight along the exterior border, excavated by the interior angle, and more deeply so on the adjoining part of the interior border; a few blackish flecks, a blackish subapical and subcostal streak, a blackish discal dot, and an exterior oblique blackish band, which does not extend to the costa. Length of the body 6 lines; of the wings 14 lines.

Brazil. In Mr. Saunders' collection.

4. Pamea vittata.

Mas. *Testacea; caput et thorax fulvo alboque varia; alæ anticæ subfalcatæ, antice pallidiores, guttis duabus fuscis discalibus, fasciis duabus duplicatis angustis undulosis fulvis, macula tetragona fusca strigaque submarginali albida, margine exteriore undulato; posticæ gutta discali nigricante, vitta media fusca, fasciaque duplicata exteriore angusta undulosa fusca.*

Male. Testaceous. Head above white, tawny in front. Antennæ white. Thorax tawny in front, partly white behind. Fore wings slightly hooked, paler in front, with two minute brown discal dots between two pair of slender undulating tawny bands; the outer pair contain a tetragonal brown spot, and there is a whitish streak between the latter and the undulating exterior border; interior angle rounded; interior border straight. Hind wings with a

blackish discal dot, with a brown middle stripe, and with an exterior pair of slender undulating brown bands. Length of the body 6 lines; of the wings 16 lines.

Brazil. In Mr. Saunders' collection.

5. PAMEA TRANSIENS.

Mas. *Pallide cervina; alæ antica falcatæ, fascia obliqua fusca extus fulva, alteraque exteriore gracillima angulosa fulva, margine exteriore undulato; posticæ apud marginem interiorem albidæ fusco maculatæ.*

Male. Pale fawn-colour. Fore wings falcate, with an oblique brown band at a little beyond the middle; the outer side of this band is tawny, and there is an indistinct zigzag very slender tawny band between it and the exterior border, which is undulating; interior angle somewhat rounded; interior border almost straight. Hind wings fawn-colour; interior border whitish, with brown spots. Length of the body 4½ lines; of the wings 12 lines.

New South Wales. In Mr. Saunders' collection.

Genus 32. NIACA.

Mas. Corpus gracillimum, fere nudum. Proboscis non conspicua. Palpi brevissimi. Antennæ mediocriter pectinatæ, thoracis longitudine. Pedes graciles; tibiæ posticæ calcaribus nullis. Alæ latæ; anticæ apud costam convexæ, apice rotundatæ, margine exteriore vix obliquo; posticæ abdomen superantes.

Male. Body very slender, almost bare. Proboscis obsolete. Palpi very short. Antennæ moderately pectinated, as long as the thorax. Abdomen not extending so far as the hind wings. Legs slender; hind tibiæ without spurs. Wings broad. Fore wings convex along the costa, rounded at the tips, hardly oblique along the exterior border; first and second inferior veins nearly contiguous at the base; third about twice further from the fourth than from the second.

1. NIACA CURVIMARGO.

Mas. *Fusca; antennæ testaceæ; pedes antici nigri; alæ cervinæ, anticæ supra fuscæ lituris nonnullis nigricantibus.*

Male. Brown. Antennæ testaceous. Fore legs mostly black. Wings dull fawn-colour. Fore wings above brown, with some darker marks for half the length from the base; the apical half with a slightly oblique band of blackish marks. Length of the body 2¾ lines; of the wings 7½ lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 33. MAREDA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi porrecti, validi, pilosi; caput vix superantes; articulus 3us obtusus, minimus. Antennæ sat late pectinatæ, thorace longiores. Abdomen alas posticas non superans. Pedes sat validi. Alæ mediocriter latæ; anticæ apud costam rectæ, apice subangulatæ, margine exteriore vix obliquo.

Male. Body moderately stout. Proboscis obsolete. Palpi porrect, stout, pilose, hardly extending beyond the head; first joint very short; third very minute and obtuse. Antennæ rather deeply pectinated, longer than the thorax. Abdomen extending as far as the hind wings. Legs rather stout; hind legs wanting. Wings moderately broad. Fore wings straight along the costa, almost angular at the tips, hardly oblique along the exterior border; first and second inferior veins contiguous at the base; third more than twice further from the fourth than from the second.

1. MAREDA FERRUGINEA.

Mas. *Ferruginea; coxæ anticæ apice albæ; alæ nitentes, posticæ pallidiores, subtus testaceæ.*

Male. Ferruginous. Fore coxæ bright white at the tips. Wings shining. Hind wings rather paler than the fore wings, testaceous beneath. Length of the body 4 lines; of the wings 9 lines.

Rio Janeiro. In Mr. Fry's collection.

Fam. 7. DREPANULIDÆ.

Habitus geometriformis. Proboscis sæpissime nulla, nonnunquam conspicua. Palpi sæpissime brevissimi, nonnunquam breves. Antennæ *maris* sæpissime pectinatæ, *fœminæ* simplices. Abdomen alas posticas non superans. Pedes sæpissime graciles. Alæ latæ; anticæ sæpe falcatæ. Larva nuda, pedibus 14, dorso gibbosa, postice attenuatæ, pedibus analibus nullis. Pupa graciles; folliculus folio convoluto inclusa.

Drepanulides, *Boisd. Gen. Eur. Lep.* 82; *Herr.-Schæff.*
Platyptericidæ, *Steph. Ill. Brit. Ent. Haust.* iv. 3.
Platypteridæ, *Duponch. Cat. Méth. Lép. Eur.* 85.

Synopsis of Genera.

A. Alæ anticæ plus minusve falcatæ.
  A. Palpi caput superantes.
    a. Proboscis distincta.
      a. Alæ latissimæ.
        i. Alæ falcatæ. - - - - 16. Oxytenis.
        ii. Alæ vix falcatæ. - - - - - 15. Apha.
      b. Alæ latæ. - - - - 18. Draconipteris.
    b. Proboscis non conspicua.
      a. Antennæ *maris* mediocriter pectinatæ. 17. Teratopteris.
      b. Antennæ *maris* late pectinatæ. - - 20. Tagora.
  B. Palpi caput non superantes.
    a. Pedes validi.
      a.
        i. Palpi brevissimi. - - - - - 19. Cricula.
        ii. Palpi non brevissimi.
          * Tibiæ posticæ calcaribus sat longis. 5. Negera.
          ** Tibiæ posticæ calcaribus minutis. 22. Lonomia.
          *** Tibiæ posticæ calcaribus minimis. - 2. Oreta.
    b. Pedes graciles. - - - - - - 1. Drepana.
B. Alæ anticæ non falcatæ.
  A. Proboscis non conspicua.
    a. Palpi caput superantes.
      a. Alæ posticæ abdomen superantes. - - 6. Cifuna.
      b. Alæ posticæ abdomen ad æquantes.
        i. Alæ latæ. - - - - - 9. Prothysana.
        ii. Alæ longæ, latiusculæ. - - - 10. Tephlia.

iii. Alæ angustæ. - - - - - 11. ARNA.
c. Abdomen alas posticas paullo superans. - 7. ZANOLA.
d. Abdomen alas posticas longe superans. 23. THENOPA.
B. Palpi caput non superantes.
a. Alæ posticæ abdomen superantes.
i. Corpus gracillimum. - - - 13. CILIX.
ii. Corpus gracile.
* Alæ posticæ latæ. - - - 8. ANTICLA.
** Alæ posticæ vix latæ. - - - 12. CANIA.
iii. Corpus sat robustum. - - - 21. GANISA.
b. Alæ posticæ abdomen ad æquantes. - 14. NATAXA.
c. Abdomen alas posticas superans. - - 4. MORESA.
B. Proboscis conspicua. - - - - - 3. ROSEMA.

Genus 1. DREPANA.

Corpus gracillimum. Proboscis non conspicua. Palpi brevissimi, caput non superantes. Antennæ thorace longiores. Pedes graciles, nudi; tibiæ posticæ calcaribus quatuor breviusculis. Alæ latæ; anticæ falcatæ, apud costam convexæ, margine exteriore undulato aut indentato, angulo interiore rotundato. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ vix pectinatæ, longiores.

Drepana, *Schr. Faun. Boic.* ii. 2, 155.
Geometra, p., *Linn.; Wien. Verz.; Gmel.; Thunb.*
Phalæna, p., *Fabr.*
Bombyx, p., *Hübn.; Borkh.; Esp.*
Falcaria, *Haw.*
Prionia, Syssaura et Drepania, *Hübn. Verz. Schmett.*
Platypteryx, *Lasp.* pl. 27; *Leach; Boisd.*
Platypteryx et Drepana, *Steph.*
Ancistrota? *Hübn.*

Body very slender. Proboscis not visible. Palpi very short, not extending as far as the head. Antennæ longer than the thorax. Abdomen not extending so far as the hind wings. Legs slender, bare; hind tibiæ with four rather short spurs. Wings broad. Fore wings falcate, slightly convex along the costa, undulating or indented along the exterior border; interior angle rounded; discal areolet intersected by a secondary vein; second inferior vein more than twice further from the third than from the first; third not further from the fourth than from the second. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ very minutely pectinated, much longer than those of the male.

Europe.

A. Alarum anticarum limbus rectilineus.
  A. Alæ omnes strigis duabus transversis lineaque undulata pallidioribus.
    a. Area media lunula obsoletissima obscuriore. unguicula, *Hübn.*
    b. Area media punctis binis fuscis. - hamula, *Wien. Verz.*
  B. Alæ anticæ strigis tribus dentatis fuscis ante undulatæ pone strigam ferrugineam rectam ex apice versus medium marginis interioris.
    a. Fusca, subtus ochracea; area media punctis duobus oblique positis obsoletis. - - - - curvatula, *Lasp.*
    b. Pallide ochracea; area media punctis duobus longitudinaliter positis et macula tripartita fuscis. - falcataria, *Linn.*
B. Alarum anticarum limbus pone medium in angulum obtusum productus. - - - - - - - Sicula, *Esp.*
C. Alarum anticarum limbus in æqualiter erosodentatus. lacertinaria, *Linn.*

1. Drepana unguicula.

Lutescens; alæ fascia lata obscuriore antice dilatata fusco marginata; anticæ gutta fusca.

Bombyx sicula, *Wien. Verz.* 64, 1. *Esp. Schmett.* iii. pl. 74, f. 4, 7.
Bombyx unguicula, *Hübn. Bomb.* pl. 12, f. 48.
Platypteryx unguicula, *Lasp. Treits. Boiid. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, iii. 1.
Drepania unguicula, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Falcatæ*) 149, 1571.
Drepana unguicula, *Steph. Ill. Brit. Ent. Haust.* iv. 7, 4. *Wood, Ind. Ent.* pl. 26, f. 756.
Phalæna cultraria, *Fabr. Syst. Ent.* 621; *Sp. Ins.* ii. 243, 11; *Mant. Ins.* ii. 186, 14; *Ent. Syst.* iii. 2, 133, 17.
Geometra cultraria, *Gmel. ed. Syst. Nat.* i. 5, 2449, 604.
Falcaria unguicula, *Haw. Lep. Brit.* 153.

a—m. England. From Mr. Stephens' collection.
n—r. England.

2. Drepana hamula.

Cervina; alæ anticæ fasciis duabus angustis flexis flavescentibus guttisque duabus intermediis fuscis; posticæ pallide lutea, nonnunquam ex parte cervinæ flavoque bilineatæ.

Geometra hamula, *Wien. Verz.* 64.
Geometra binaria, *Hüfn. Berl. Mag.* iv. 516.
Phalæna falcata, *Fabr. Syst. Ent.* 629; *Sp. Ins.* ii. 254, 68; *Mant. Ins.* ii. 197, 106; *Ent. Syst.* iii. 165, 131. *Stew. El. Nat. Hist.* ii. 62. *Turt. Syst. Nat.* iii. 248.
Geometra falculataria, *Vill. Ent.* ii. 301, pl. 6, f. 1.
Geometra falcata, *Gmel. ed. Syst. Nat.* i. 5, 2453, 621.
Bombyx uncinula, *Bork. Eur. Schmett.* iii. 461.
Bombyx hamula, *Wien. Verz.* 64, 4. *Hübn. Bomb.* pl. 12, f. 46, 47.
Phalæna hamula, *var.*, *Ochs. Schmett.* iv. 97.
Phalæna lacertinaria? *Wilkes*, 14, pl. 30.
——— ———, *Albin, Engl. Ins.* pl. 65, f. a—d. *Harr. Aur.* pl. 41, f. a, b.; *Vade Mec.* 49.
Platypteryx hamula, *Lasp. Treits. Boisd. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, iii. 2.
Var. Bombyx uncula, *Hübn. Bomb.* pl. 12, f. 45.
Var. Drepania uncula, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Falcatæ*) 149, 1569.
Drepania hamula, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Falcatæ*) 149, 1750.
Drepana uncula, *Wood, Ind. Ent.* pl. 26.

a—m. England. From Mr. Stephens' collection.
n—r. England.
s, t. Europe. From M. Becker's collection.
v. ———?

3. Drepana curvatula.

Fuscescens; alæ fasciis undulosis obscurioribus non bene determinatis; anticæ valde falcatæ, macula discali fasciaque antice retracta fuscis.

Bombyx curvatula, *Borkh. Eur. Schmett.*
Platypteryx curvatula, *Lasp. Treits. Boisd. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 112, 3.
Bombyx Harpagula, *Hübn. Bomb.*
Draconipteris harpagula, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Dentatæ*) 150, 1581.

a—d. Europe. From M. Becker's collection.

4. Drepana falcataria.

Testacea aut cervina; alæ fasciis undulosis obscurioribus non bene determinatis; anticæ falcatæ macula discali fasciaque fuscis.

Drepana falcataria, *Steph. Ill. Brit. Ent. Haust.* iv. 6. *Westw. & Humph. Brit. Moths.* ii. 83, pl. 74, f. 4, 5.
Geometra falcataria, *Linn. Syst. Nat.* i. 2, 859, 209; *Faun. Suec.* 1124. *Gmel. ed. Syst. Nat.* i. 5, 2449, 202. *Turt. Syst. Nat.* iii. 233.
Phalæna falcataria, *Fabr. Sp. Ins.* ii. 242, 10; *Mant. Ins.* ii. 186, 13; *Ent. Syst.* iii. 2, 133, 16.
Bombyx falcataria, *Wien. Verz.* 64, 2.
——— ———, *Schæff. Icon.* pl. 64, f. 1, 2. *Deg. Ins.* i. pl. 24, f. 7. *Kühn. Naturf.* 9, 97, pl. 1, f. 6. *Harris, Vade Mec.* 49.
Bombyx falcula, *Esp. Eur. Schmett. Hübn. Bomb.* pl. 11, f. 44.
Falcaria falcula, *Haw. Lep. Brit.* 152.
Platypteryx falcula, *Lasp. Treits. Boisd. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 112, 4.
Syssaura falcula, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Falcatæ*) 150, 1572.

a—m. England. From Mr. Stephens' collection.
n—p. England.
q—t. Europe. From M. Becker's collection.
v—w. ———?

5. Drepana Sicula.

Cervina; alæ anticæ inter lineas binas dentatas fuscas macula obscuriore flavo notata.

Geometra Sicula, *Wien. Verz.* 64.
Bombyx Harpagula, *Esp. Schmett.* iii. 378, pl. 74, f. 4—7.
Bombyx sicula, *Hübn. Bomb.* pl. 11, f. 41.
Platypteryx Sicula, *Lasp. Treits. Boisd. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text.* 112, 5.
Syssaura Sicula, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Falcatæ*) 150, 1573.

Europe.

6. Drepana lacertinaria.

Pallide ochracea; alæ anticæ puncte medio, strigis ambabus et ciliis fuscis; posticæ innotatæ.

Geometra lacertinaria, *Linn. Syst. Nat.* i. 2, 519; *Faun. Suec.* 1229. *Gmel. ed. Syst. Nat.* i. 5, 2450, 204.
Phalæna lacertinaria, *Fabr. Sp. Ins.* ii. 243, 14; *Mant. Ins.* ii. 186, 17; *Ent. Syst.* iii. 2, 135, 20. *Berk. Syn.* i. 144. *Donov. Nat. Hist. Brit. Ins.* vii. 92, pl. 251, f. 2. *Stew. El. Nat. Hist.* ii. 160. *Turt. Syst. Nat.* iii. 233.

Geometra lacertula, *Wien. Verz.* 64.
Geometra dentaria, *Thunb. Diss.* 1, 5.
——— ———, *Albin, Ins.* pl. 65. *Réaum. Ins.* ii. pl. 22, f. 4—6. *Deg. Ins.* i. 695, pl. 10, f. 5—8; ii. 335, 3, pl. 5, f. 6. *Sulz. Hist. Ins.* pl. 22, f. 10. *Schæff. Icon.* pl. 66, f. 2, 3. *Wilkes, Pap.* 74, pl. 1, 3. *Harris, Vade Mec.* 49.
Falcaria lacertula, *Haw. Lep. Brit.* 153.
Falcaria curvula, *Haw. Lep. Brit.* 154.
Bombyx lacertula, *Esp. Eur. Schmett. Hübn. Bomb.* pl. 12, f. 49.
Phalæna scincula, *Hübn. Geom.* pl. 12, f. 50.
Platypteryx lacertula, *Lasp. Treits. Boisd. Steph. Ill. Brit. Ent. Haust.* iv. 4. *Wood, Ind. Ent.* pl. 26, f. 751. *Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text,* 112, 6.
Prionia lacertula, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Dentatæ*) 151, 1562.
Platypteryx cultraria, *Leach, Edin. Enc.* ix. 134. *Steph. Ill. Brit. Ent. Haust.* iv. 5. *Wood, Ind. Ent.* pl. 26, f. 752.

a—p. England. From Mr. Stephens' collection.
q—y. England.
z—aa. Europe. From M. Becker's collection.

North America.

A. Alæ fusco-lutescentes. - - - - - fasciata, *Steph.*
B. Alæ testaceæ. - - - - - - - arcuata, *Walk.*
C. Alæ flavo-roseæ.
A. Alæ non guttatæ. - - - - - rosea, *Walk.*
B. Alæ guttatæ. - - - - marginata, *Walk.*

7. Drepana fasciata.

Alæ fusco-lutescentes; anticæ strigis duabus obliquis fuscis ad marginem crassiorem incurvatis; posticæ striga unica.

Drepana fasciata, *Steph. Ill. Brit, Ent. Haust.* iv. 8, 5.
Falcaria uncula, *Haw. Lep. Brit.* 153.

"Wings brownish yellow: anterior with two oblique brown strigæ, bent towards the costa; the posterior one with a brown cloud attached towards the outer margin; between these streaks is a small black dot towards the anterior edge of the wing: posterior wings with a single streak."

North America.

8. DREPANA ARCUATA.

Mas. *Pallide testacea; alæ anticæ valde falcatæ, strigis obliquis costalibus, fasciis duabus angulosis basalibus, guttis duabus discalibus fasciisque tribus exterioribus fuscis; posticæ fasciis nonnullis undulosis subobsoletis fulvis guttisque duabus discalibus fuscis.*

Male. Pale testaceous. Antennæ with brown branches. Fore wings very falcate, with brown oblique streaks along the costa; with two slender zigzag brown bands near the base, with two dark brown discal dots, and with three exterior brown bands; the first and the third of the latter slight and undulating; the second darker, more distinct and nearly straight, ending at the tip of the wing, which is pale brown in front and gray behind, excepting the extreme tip, which is wholly dark brown. Hind wings with several indistinct tawny undulating bands, and with two minute brown discal dots. Length of the body 4 lines; of the wings 15 lines.

This species closely resembles *D. falcataria* in form and colour and markings; but may be distinguished by its more falcate fore wings, by the more oblique second exterior band, by the less numerous and less distinct bands of the hind wings, and by other differences.

a. Nova Scotia. From Lieut. Redman's collection.

The two following species differ from the European groups of *Drepana* by the outline of their fore wings, which are convex in the middle of the exterior border.

9. DREPANA ROSEA.

Mas. *Sordide rosea; caput læte roseum; alæ basi ex parte flavæ fasciaque obliqua subundulosa flava in posticis dilatata, anticæ apud costam subrectæ, apice subfalcatæ.*

Male. Pale dull rose-colour. Head bright rose-colour. Antennæ with rather short and thick-set branches. Hind tibiæ with the apical spurs rather long. Wings partly yellow towards the base, with a yellow oblique and slightly undulating band, which in the hind wings is dilated, and occupies the whole apical half of the wing, with the exception of a spot in front of the exterior border. Fore wings nearly straight along the costa, slightly falcate at the tips; exterior border undulating, convex in the middle; third

inferior vein thrice further from the fourth than from the second. Length of the body 4 lines; of the wings 12 lines.

a. Nova Scotia. From Lieut. Redman's collection.

10. DREPANA MARGINATA.

Mas. *Flava; caput roseum; alæ fasciis nonnullis angustis obliquis undulosis subobsoletis rufescentibus; anticæ apud costam fere rectæ, apice subfalcatæ, margine exteriore unduloso rufo nigro notato, guttis duabus discalibus albis.*

Male? Like *D. rosea* in the form of its wings. Yellow. Head rose-colour. Antennæ like those of *D. rosea* in structure. Legs partly red, more pilose than those of D. *rosea*; hind tibiæ with very minute spurs. Wings with some slender indistinct oblique and undulating pale reddish bands. Fore wings nearly straight in front, slightly falcate at the tips, undulating along the exterior border, which is convex in the middle; costa with a slight reddish tinge towards the base; exterior border with a red band, which contains some black marks, and is continued to the fore part of the exterior border of the hind wings; two white discal dots; second inferior vein about twice further from the third than from the first; third twice further from the fourth than from the second. Length of the body 4 lines; of the wings 12 lines.

a. ———?

South America.

11. DREPANA? APICULATA.

Alæ falcatæ, supra pallide testaceæ, linea obliqua obscuriore, subtus lutescentes, linea obscure fusca, apice subcinereo.

Drepana apiculata, *Dalm. Anal. Entom.* 51, 27.

Brazil.

12. DREPANA? FLAVARIA.

Mas. *Corpus testaceum; alæ ferrugineo marginatæ; anticæ costa strigaque posticæ e maculis tribus luteis; posticæ luteæ.*

Phalæna flavaria, *Cram. Pap. Exot.* iii. 171, pl. 287, f. F.

Ancistrota flavifuscula, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Falcatæ*) 149, 1568.

Surinam.

Genus 2. ORETA.

Corpus sat robustum. Proboscis non conspicua. Palpi breves, caput non superantes; articulus 3us minimus. Antennæ thorace paullo longiores. Pedes validi, pilosi; tibiæ posticæ calcaribus duobus minimis apicalibus. Alæ luteæ; anticæ apud costam vix convexæ, apice subfalcatæ, margine exteriore undulatæ; posticæ abdomen superantes. *Mas.*—Antennæ mediocriter pectinatæ. *Fœm.*—Antennæ subpectinatæ.

Body moderately stout. Proboscis not visible. Palpi short, not extending beyond the head; third joint very small. Antennæ rather longer than the thorax. Abdomen not extending so far as the hind wings. Legs stout, pilose; hind tibiæ with two very minute apical spurs. Wings broad. Fore wings hardly convex in front, slightly falcate at the tips, undulating along the exterior border; interior angle distinct, obtuse; first and second inferior veins nearly contiguous at the base; third more or less further from the fourth than from the second. *Male.*—Antennæ moderately pectinated. *Female.*—Antennæ minutely pectinated.

Asia.

A. Alæ longiusculæ - - - - - - extensa, *Walk.*
B. Alæ breviusculæ.
A. Alæ anticæ sinu antico apud marginem exteriorem bene determinato. - - - - - - obtusa, *Walk.*
B. Alæ anticæ sinu non bene determinato. - suffusa, *Walk.*

1. ORETA EXTENSA.

Mas. *Rufo-cervina; caput et pedes antici rufa; thorax antice albido varius; alæ anticæ basi ex parte fasciaque recta gracili obliqua flavis; posticæ flavæ guttis rufescentibus.*

Male. Reddish fawn-colour. Head and fore legs red. Thorax with whitish hairs in front. Fore wings partly yellow towards the base, and with a straight slender oblique yellow band, which extends from near the tip of the costa to two-thirds of the length of the interior border; tips somewhat obtuse; exterior border very slightly undulating, slightly concave in front, more oblique than that of the two following species. Hind wings mostly yellow, with reddish dots. Length of the body 6 lines; of the wings 16 lines.

a. East Indies. From Archdeacon Clerk's collection.

2. ORETA SUFFUSA.

Mas. *Cervina, vix purpurascens; caput et pedes lutea; thorax antice albidus; alæ cinereo guttatæ, basi et apud marginem exteriorem flavescentes, anticæ cinereo-flavoque fasciatæ macula postica nigricante; tibiæ nigro univittatæ et uniguttatæ.*

Male. Lilac fawn-colour. Head and legs luteous. Thorax whitish in front. Wings with numerous grayish spots, yellowish towards the base and along the exterior border. Fore wings with the darker middle part bounded on the inside by an undulating gray band, and on the outside by a more oblique and nearly straight yellow band; a blackish spot by the interior angle; costa hardly convex; less obtuse at the tips than in *O. extensa;* exterior border more oblique and less concave in front than that of *O. obtusa.* Hind wings with the darker middle part very narrow. Each tibia with a slender black stripe and a black dot. Length of the body 6 lines; of the wings 16 lines.

a. Ceylon. Presented by R. Templeton, Esq.

3. ORETA OBTUSA.

Fœm. *Testaceo-flava aut testacea; caput rufum; thorax nonnunquam ferrugineus; pedes ex parte rufi, tibiis nigro univittatis; alæ fascia obliqua ferruginea aut fusca, nonnunquam apud apices albido notatæ.*

Female. Testaceous-yellow. Head red. Thorax pale ferruginous. Legs partly red; each tibia with a slender black stripe. Wings with an oblique irregular pale ferruginous band, which is much widened towards the costa of the fore wings; the wings between this band and the base have pale ferruginous marks, and brown marks beyond it. Fore wings with the outer side of the ferruginous band bordered with brown; a ferruginous band along the exterior border, extending to the fore part of the exterior border of the hind wings, and a whitish mark by each tip; under side reddish ferruginous, with the exception of a blackish band. Hind wings ferruginous towards the base on the under side. Length of the body 5—6 lines; of the wings 16—18 lines.

Var. β. Testaceous, with brown marks, and with a very slender brown band.

a, b. Silhet. From the Rev. J. Stainforth's collection.

Australia.

4. Oreta sobria.

Mas. *Ferruginea; caput supra testaceum; alæ anticæ apice subfalcatæ, fasciis duabus obliquis maculaque postica fuscis.*

Male. Ferruginous. Head above and antennæ testaceous. Abdomen extending as far as the hind wings. Fore wings straight along the costa till near the tips, where they are slightly convex, slightly falcate at the tips, oblique and slightly undulating along the exterior border; two brown oblique bands, the inner one straight and distinct, the outer one indistinct and undulating; interior border with a brown spot between the two bands. Hind wings with the border slightly undulating; interior border with brown marks. Length of the body 5 lines; of the wings 12 lines.

a. New Holland. From Mr. Argent's collection.

Genus 3. ROSEMA.

Mas. Corpus sat gracile. Proboscis distincta, capitis latitudine non longior. Palpi graciles, oblique ascendentes, caput non superantes; articulus 3us lanceolatus, 1o brevior. Antennæ subpectinatæ, apices versus nudæ, corporis dimidio longiores. Abdomen alas posticas vix superans. Pedes subpilosi; tibiæ posticæ calcaribus quatuor breviusculis. Alæ anticæ sublatæ, apud costam subconvexæ, apice vix acuminatæ, margine exteriore recto perobliquo.

Male. Body rather slender; hairs smooth, closely applied to the body. Proboscis distinct, not longer than the breadth of the head. Palpi slender, pubescent, obliquely ascending, not extending beyond the head; second joint more than twice longer than the first; third lanceolate, shorter than the first. Antennæ slightly pectinated to rather beyond half the length, bare from thence to the tips, more than half the length of the body. Abdomen hardly extending beyond the hind wings. Legs slightly pilose; hind tibiæ with four spurs, the middle pair very short, the apical pair rather longer. Fore wings moderately broad, slightly convex along the costa, hardly pointed at the tips, straight and very oblique along the exterior border; second inferior vein about thrice further from the third than from the first.

In *R. apicalis* the preceding generic characters are somewhat modified; the abdomen extends for one-third of its length beyond the hind wings, and the hind tibiæ have four rather long spurs.

1. ROSEMA DORSALIS.

Mas. *Prasina, albo varia; palpi lutei; thorax vitta latissima fusca; pectus album; abdomen luteum, basi apiceque albidum; pedes testacei, antici lutei; alæ anticæ apud costam luteæ, guttis duabus apicalibus fuscis; posticæ testaceæ.*

Male. Grass-green. Head white in front above. Palpi and antennæ luteous. Thorax with a very broad brown stripe, whitish behind and in front of the base of each wing. Pectus white. Abdomen luteous, whitish at the base and at the tip; under side whitish, pale green towards the tip. Legs testaceous; fore legs luteous. Fore wings luteous on the costa, two brown apical dots; under side of the exterior border with a pale brown stripe, which is dilated in the middle. Hind wings testaceous; under side mostly pale green. Length of the body 5 lines; of the wings 14 lines.

a. Brazil. Presented by E. Doubleday, Esq.

2. ROSEMA APICALIS.

Mas. *Prasina; caput antice, pectus et abdomen alba; palpi, antennæ et pedes testacea; alæ anticæ apud costam testaceæ, margine exteriore inciso, gutta discali fusca; posticæ albido-testaceæ, apud costam fuscescentes.*

Male. Grass-green. Head white in front. Palpi, antennæ and legs testaceous. Thorax with a broad pale brown stripe, whitish hindward. Pectus and abdomen white. Fore wings testaceous on the costa, with two excavations in front of the exterior border, which is brown; a small brown dot on the disk; under side whitish testaceous, with the exception of the brown border. Hind wings whitish testaceous, brownish along the costa. Length of the body 6 lines; of the wings 16 lines.

a. Honduras. From Mr. Dyson's collection.

3. ROSEMA ZELICA.

Prasina; thorax antice luteo fasciatus; antennæ luteæ; alæ anticæ luteo marginatæ; posticæ testaceæ; abdomen luteum, apice viride.

Phalæna-Bombyx Zelica, *Anon, Ins. Surin.* ii. pl. 79.

Surinam.

4. Rosema epigena.

Viridis; thoracis margo anticus et vitta dorsalis cinerea; abdomen albidum; alæ anticæ costa, macula postica basali, gutta discali margineque exteriore albidis; posticæ albidæ.

Phalæna-Bombyx epigena, *Anon*, *Ins. Surin.* 227, pl. 102.

Surinam.

5. Rosema Deolis.

Mas. *Læte prasina; caput testaceum; palpi fusci, subtus albidi; antennæ fulvæ; pectus albidum; abdomen luteum, subtus testaceum; alæ anticæ vitta costali lutea postice alba, subtus testaceæ; posticæ luteæ, subtus testaceæ.*

Bombyx Deolis, *MSS.*

Male. Bright grass-green. Head testaceous, excepting the hind border. Palpi brown, whitish beneath. Antennæ whitish, with tawny branches, simple towards the tips, full half the length of the body. Pectus whitish. Abdomen luteous, testaceous beneath, extending for one-third of its length beyond the hind wings. Legs tawny. Fore wings with a luteous costal stripe, which is bordered with white on the hind side; under side testaceous; costa very slightly convex; exterior border straight, very oblique. Hind wings luteous, testaceous beneath. Length of the body 8 lines; of the wings 18 lines.

Cayenne. In the collection of Mr. Saunders.

Genus 4. MORESA.

Fœm. Corpus cylindricum, longiusculum, sat validum. Antennæ subpectinatæ. Abdomen alas posticas paullo superans. Pedes sat graciles; tibiæ posticæ quadricalcaratæ. Alæ mediocriter latæ; anticæ longiusculæ, apud costam convexæ, apice subacuminatæ, margine exteriore perobliquo.

Female. Body cylindrical, rather long, moderately stout. Antennæ slightly pectinated. Abdomen extending for about one-fourth of its length beyond the hind wings. Legs rather slender; hind tibiæ with four spurs, the apical pair much longer than the others. Wings moderately broad. Fore wings convex along the costa,

somewhat acuminated at the tips, extremely oblique along the exterior border, almost twice the length of the hind wings; three inferior veins; second about twice further from the third than from the first.

1. MORESA COSTALIS.

Fœm. *Prasina; caput album, antice fuscum viridi biguttatum; pectus album, viridi bivittatum; abdomen luteum, basi supra viride; pedes testacei; alæ anticæ albæ costa fasciaque perobliqua excisa latiuscula fuscis atomariis; posticæ pallide luteæ.*

Female. Deep grass-green. Head white, brown in front, with a green dot on each side. Pectus white, with two green stripes. Abdomen pale luteous, green at the base above. Legs testaceous. Fore wings white, with black flecks along the costa, and with a middle, jagged, rather broad and very oblique band of the same colour; under side testaceous. Hind wings pale luteous, testaceous beneath. Length of the body 11 lines; of the wings 29 lines.

a. Brazil. Presented by W. Wilson Saunders, Esq.

Genus 5. NEGERA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi porrecti, sat graciles, fere nudi, caput non superantes; articulus 3us conicus, minimus. Antennæ late pectinatæ, thorace longiores. Pedes sat validi, subpilosi; tibiæ posticæ calcaribus duobus apicalibus mediocriter longis. Alæ latæ; anticæ apud costam subconvexæ, apice vix falcatæ, margine exteriore subobliquo et subunduloso; posticæ abdomen superantes.

Male. Body moderately stout. Proboscis not visible. Palpi porrect, rather slender, nearly bare, not extending quite so far as the head; third joint conical, very minute. Antennæ deeply pectinated, longer than the thorax. Abdomen not extending so far as the hind wings. Legs rather stout, slightly pilose; hind tibiæ with two moderately long apical spurs. Wings broad. Fore wings slightly convex along the costa, hardly falcate at the tips; slightly oblique, and very slightly undulating along the exterior border; interior angle rounded; second inferior vein twice further from the third than from the first; third much more than twice further from the fourth than from the second.

1. NEGERA CONFUSA.

Mas. *Pallide rufo-cervina ; palpi nigricantes ; abdomen lateribus apiceque albido-testaceum ; tibiæ anticæ fusco unimaculatæ ; alæ fascia gracillima recta obliqua testacea ; anticæ flavo variæ, apud costam cinereo notatæ.*

Male. Pale reddish fawn-colour. Palpi blackish. Antennæ testaceous. Abdomen whitish testaceous along each side and at the tip. Fore tibiæ with a brown spot on the inner side. Wings with a very slender straight oblique testaceous band, which extends from the tips of the fore wings to a little beyond half the length of the interior border of the hind wings; a slight lilac tinge in some parts of the disk. Fore wings with some gray marks along the costa, partly yellowish towards the base and along the exterior border; underside with a brown band corresponding to the testaceous one above. Hind wings with no band beneath. Length of the body 6 lines; of the wings 16 lines.

a. Africa. Presented by E. Doubleday, Esq.

Genus 6. CIFUNA.

Mas. Corpus sat validum. Proboscis non conspicua. Palpi porrecti, pilosi, caput superantes; articulus 3us minutus, conicus. Antennæ mediocriter pectinatæ. Pedes validi, subpilosi; tibiæ posticæ calcaribus quatuor longiusculis. Alæ latæ; anticæ apud costam subconvexæ, apice angulatæ, margine exteriore recto obliquo; posticæ abdomen superantes.

Male. Body moderately stout. Proboscis not visible. Palpi porrect, pilose, somewhat stout, extending rather beyond the head; third joint minute, conical. Antennæ moderately pectinated. Abdomen not extending so far as the hind wings. Legs stout, slightly pilose; hind tibiæ with four rather long spurs. Wings broad. Fore wings slightly convex along the costa, forming an almost right angle at the tips, oblique and straight along the exterior border; interior angle obtuse, distinct; first and second inferior veins nearly contiguous at the base; third full twice further from the fourth than from the second.

1. CIFUNA LOCUPLES.

Mas. *Fulva; thorax posticus et abdomen testacea; alæ anticæ luteæ albido subpurpureo variæ, fasciis undulosis unaque obscuriore exteriore subrecta ferrugineis; posticæ testaceæ; quatuor subtus fulvæ macula discali fasciaque exteriore fuscis.*

Male. Tawny. Antennæ, abdomen and hind part of the thorax testaceous. Fore wings luteous, tinged here and there with whitish lilac, adorned with some ferruginous bands, which are undulating and indistinct, with the exception of the exterior one, which is darker, oblique and nearly straight; under side tawny, with a brown mark across the tip of the discal areolet, and with a brown exterior band. Hind wings pale testaceous; under side tawny, with marks like those of the fore wings. Length of the body 7 lines; of the wings 21 lines.

a. Silhet. Presented by E. Doubleday, Esq.

Genus 7. ZANOLA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi porrecti, pilosi, sat validi, caput paullo superantes; articulus 3us minutus, conicus. Antennæ subpectinatæ, thorace non longiores. Abdomen alas posticas paullo superans. Pedes validi, pilosi; tibiæ late ciliatæ, posticæ calcaribus quatuor sat longis. Alæ longiusculæ, sat latæ; anticæ apud costam subconvexæ, apice angulatæ, margine exteriore obliquo exciso.

Male. Body moderately stout. Proboscis not visible. Palpi porrect, pilose, rather stout, extending a little beyond the head; third joint minute, conical. Antennæ minutely pectinated, about as long as the thorax. Abdomen extending a little beyond the hind wings. Legs stout, pilose; tibiæ deeply ciliated; hind tibiæ with four moderately long spurs. Wings moderately broad, rather long. Fore wings slightly convex in front, angular at the tips; exterior border moderately oblique, concave betwen the veins, and with a longer indentation by the costa; interior angle rounded; three inferior veins; second about four times further from the third than from the first.

This genus, and *Ennomos*, and some other genera of the *Geometrites*, appear to connect the latter tribe with the *Drepanulidæ*.

1. ZANOLA DIFFICILIS.

Mas. *Albido-testacea, fusco conspersa; alæ flavescentes; anticæ quadrifasciatæ; fascia 2a lata atomaria fusca, 3a albido subpurpurea, 1a 4aque linearibus necnon lunulis exterioribus obscure fuscis; posticæ bifasciatæ, fascia una ferruginea atomaria, altera intermedia lineari obscuriore.*

Male. Whitish testaceous, speckled with brown. Head and legs mostly brown. Fore wings yellowish, with numerous brown speckles, most of which form a broad diffuse band, which is most apparent in front, and is bordered with glistening whitish lilac, as are also two very slender dark brown bands, one at one-fourth, the other at three-fourths of the length of the wing; a row of dark brown lunules near the exterior border. Hind wings yellowish, with ferruginous speckles, most of which form a broad band; the latter is intersected by a very slender darker band. Wings more variegated beneath. Length of the body 8 lines; of the wings 19 lines.

a. Venezuela. From Mr. Dyson's collection.

Genus 8. ANTICLA.

Mas. Corpus gracile. Palpi porrecti, breves, gracillimi; articulus 3us minutus, longiconicus. Antennæ late pectinatæ. Pedes graciles; tibiæ posticæ calcaribus duobus minimis apicalibus. Alæ latæ; anticæ non falcatæ, margine exteriore subconcavo; posticæ latiores.

Male. Body slender. Palpi porrect, short, very slender; third joint minute, elongate, conical. Antennæ deeply pectinated. Abdomen not extending so far as the hind wings. Legs slender; hind tibiæ with two very minute apical spurs. Wings broad. Fore wings not falcate, but very slightly concave on the exterior borders towards the tips; three inferior veins; first and second united at the base; third remote. Hind wings broader than the fore wings.

1. ANTICLA ANTICA.

Mas. *Albida; caput, thorax antice, pedes et alæ lutea; alæ anticæ margine exteriore antico cinerascente; posticæ cinereo bifasciatæ, margine interiore fusco maculis albidis.*

Male. Body whitish. Head in front and fore part of the thorax luteous. Antennæ whitish, with tawny branches. Legs and

wings pale luteous. Fore wings grayish along the exterior border towards the tips. Hind wings with two slender gray slightly undulating bands; interior border brown, with whitish spots. Length of the body 4½—6 lines; of the wings 12—17 lines.

a, *b*. Venezuela. From Mr. Dyson's collection.

Genus 9. PROTHYSANA.

Mas. Corpus pilosum, sat gracile. Proboscis non conspicua. Palpi validi, porrecti, densissime pilosi, caput paullo superantes. Antennæ sat late pectinatæ, thorace breviores. Abdomen oblanceolatum, alas posticas non superans. Pedes validi, dense ciliati; tibiæ posticæ calcaribus quatuor breviusculis. Alæ latæ; anticæ apud costam subconvexæ, apice angulatæ; margine exteriore subobliquo vix convexo.

Male. Body pilose, rather slender. Proboscis very short or obsolete. Palpi stout, porrect, extending rather beyond the head, very deeply and thickly pilose. Antennæ moderately deeply pectinated, shorter than the thorax. Abdomen oblanceolate, not extending beyond the hind wings. Legs stout; femora and tibiæ deeply and thickly ciliated; hind tibiæ with four rather short spurs. Wings broad. Fore wings very slightly convex along the costa, almost rectangular at the tips, slightly obliqne and hardly convex along the exterior border; first and second inferior veins near together at the base.

1. PROTHYSANA TERMINALIS.

Mas. *Ferruginea; palpi pedesque supra fusci; alæ anticæ apud costam albo variæ, fasciis duabus una cana altera testacea maculaque apicali testacea lunulis nigris intersecta; posticæ fuscæ macula postica testacea.*

Male. Ferruginous. Palpi brown above. Antennæ with black branches. Legs testaceous; femora and tibiæ mostly brown above. Fore wings interrupted by white along the costa, with a testaceous apical spot, which is intersected by black lunules, with a testaceous band (which is reddish in front) at one-third of the length of the wing; between this and the apical spot there is a slender undulating hardly oblique hoary band. Hind wings brown, with a testaceous spot by the interior angle; under side ferruginous, with three or four zigzag variously formed brown bands; fringe partly white. Length of the body 6—7 lines; of the wings 14—16 lines.

Rio Janeiro. In Mr. Fry's collection.

Genus 10. TEPILIA.

Mas. Corpus sat gracile. Proboscis non conspicua. Palpi longiusculi, sat graciles, porrecti, caput superantes; articulus 3us parvus, conicus. Antennæ late pectinatæ, thorace paullo longiores. Abdomen alas posticas non superans. Pedes sat graciles; femora pilosa; tibiæ posticæ calcaribus quatuor longis. Alæ longæ, latiusculæ; anticæ apud costam rectæ, apice angulatæ, margine exteriore obliquo subconvexo.

Male. Body rather slender. Proboscis not visible. Palpi rather long and slender, porrect, extending beyond the head; third joint minute, conical. Antennæ deeply pectinated, rather longer than the thorax. Abdomen extending as far as the hind wings. Legs rather slender; femora pilose; hind tibiæ with four long spurs. Wings long, rather broad. Fore wings straight along the costa, rectangular at the tips, oblique and very slightly convex along the exterior border; interior angle obtuse, distinct; second inferior vein further by half from the third than from the first; third further by half from the fourth than from the second; two superior veins; second forked towards the tip of the wing.

1. TEPILIA BILUNA.

Mas. *Cervina; palpi fuscescentes; antennæ albidæ ramis fuscis; alæ fasciis duabus duplicatis angustis angulosis undulosis ferrugineis; anticæ guttis duabus discalibus fuscis maculisque duabus parvis lunatis subapicalibus vitreis; posticæ gutta discali fusca.*

Male. Fawn-colour. Palpi brownish. Antennæ whitish, with brown branches. Wings with two pair of slender oblique zigzag undulating ferruginous bands; the inner pair obsolete on the under side. Fore wings with two brown discal dots, and with two small lunate subapical vitreous spots. Hind wings with a single brown discal dot. Length of the body 11 lines; of the wings 32 lines.

Brazil. In Mr. Saunders' collection.

Genus 11. ARNA.

Mas. Corpus sat gracile. Palpi graciles, mediocriter longi; articulus 3us parvus, acuminatus. Antennæ sat late pectinatæ. Abdomen apice fasciculatum, alas posticas non superans. Pedes

graciles; tibiæ posticæ calcaribus duobus longis apicalibus. Alæ sat angustæ, mediocriter longæ.

Male. Body rather slender. Palpi slender, moderately long; second joint much longer than the first; third acuminated, small. Antennæ moderately deeply pectinated. Abdomen thickly tufted at the tip, extending as far as the hind wings. Legs slender; hind tibiæ with two long apical spurs. Wings rather narrow, moderately long. Fore wings with the first and second inferior veins almost contiguous at the base; third full four times further from the second than the second is from the first; fourth appearing near the base of the wing, twice further from the third than the third is from the second.

1. ARNA APICALIS.

Mas. *Fusca, subtus testacea; alæ anticæ costa apice maculaque postica luteis, guttisque duabus subapicalibus nigris; posticæ luteo marginatæ.*

Male. Brown. Head, palpi, legs, and body beneath testaceous. Fore wings luteous along the costa and towards the tips, and with a luteous spot on the hind part of the outer border; two black subapical dots; under side with the luteous colour continuous along the borders. Hind wings with luteous borders. Length of the body 3½—4½ lines; of the wings 10—12 lines.

a—*c*. Ceylon. From the Rev. J. Wenham's collection.

Genus 12. CANIA.

Mas. Corpus sat gracile. Palpi breves, graciles; articulus 3us conicus, minimus. Antennæ simplices, graciles, corporis dimidio non longiores. Pedes graciles; tibiæ posticæ calcaribus quatuor longis. Alæ latæ, subrotundatæ.

Male. Body rather slender. Palpi short, slender; second joint very much longer than the first; third conical, very small. Antennæ simple, slender, about half the length of the body. Legs slender; hind tibiæ with four long spurs. Wings broad, somewhat rounded. Fore wings with first and second inferior veins almost contiguous at the base; fourth about twice further from the third than the third is from the second.

1. Cania sericea.

Mas. *Pallide testacea, nitens, ex parte lutea.*

Male. Pale testaceous, shining. Head, thorax in front, and most of the abdomen beyond the middle with luteous hairs. Fore wings mostly luteous in the disk towards the base and along the onter border, and with an oblique luteous band at three-fourths of the length; under side of one colour. Length of the body 4 lines; of the wings 12 lines.

a. North India. From Mr. Stevens' collection.

Genus 13. CILIX.

Corpus gracillimum. Proboscis non conspicua. Palpi brevissimi; articulus 3us obtusus, minimus. Antennæ thorace multo longiores. Pedes gracillimi, subnudi; tibiæ posticæ calcaribus quatuor longis. Alæ vix latæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore perobliquo; posticæ abdomen paullo superantes. *Mas.* — Antennæ subpectinatæ. *Fœm.* — Antennæ simplices.

Cilix, *Leach, Edin. Encycl.* ix. 134; *Steph. Ill. Brit. Ent. Haust.* iv. 8; *Boisd.; Herr.-Schæff.*
Euclea, p., *Hübn. Verz. Schmett.* 149.
Geometra, p., *Wien. Verz.*
Bombyx, p., *Fabr.*

Body very slender. Proboscis not visible. Palpi very short; third joint obtuse, very small. Antennæ much longer than the thorax. Abdomen extending to about three-fourths of the breadth of the hind wings. Legs very slender, almost bare; hind tibiæ with four long spurs. Wings hardly broad. Fore wings almost straight along the costa, rounded at the tips, very oblique along the exterior border; interior angle rounded; three inferior veins; second as near to the third as to the first. *Male.* — Antennæ slightly pectinated. *Female.* — Antennæ simple.

1. Cilix spinula.

Candida; alæ anticæ fascia antice abbreviata guttisque marginalibus cinereis, plaga postica fusca.

Bombyx Attacus ruffa? *Linn. Syst. Nat.* i. 2, 1068.

Bombyx compressa, *Fabr. Ent. Syst.* iii. 1, 455, 149. *Panz. Faun. Germ.* i. pl. 6. *Donov. Nat. Hist. Brit. Ins.* vii. pl. 239, f. 2. *Stew. El.* ii. 155. *Turt. Syst. Nat.* iii. 216. *Esp. Eur. Schmett.*

Bombyx spinula, *Wien. Verz.* 64. *Hübn. Bomb.* pl. 11, f. 40.

Cilix spinula, *Lasp. Boisd. Herr.-Schæff. Samml. Eur. Schmett. Suppl.* ii. *Text*, 110, 1.

Platypteryx spinula, *Treits. Latr.*

Euclea Ruffa, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Rotundatæ*) 149, 1563.

Cilix compressa, *Leach, En. Encycl.* ix. 134. *Steph. Ill. Brit. Ent. Haust.* iv. 9, 1.

Bombyx compressus, *Haw. Lep. Brit.* 110.

Falcaria spinula, *Haw. Lep. Brit.* 154.

Geometra modesta, *Naturf.* xiii. 27, pl. 3, f. 4.

Phalæna glaucata, *Scop. Ent. Carn.* 221, pl. 32, f. 549.

——— ———, *Albin, Ins.* pl. 65, f. e—h. *Harris, Vade Mec.* 21.

a—r. England. From Mr. Stephens' collection.

s—u. England.

w, x. Europe. From M. Becker's collection.

Genus 14. NATAXA.

Mas. Corpus sat validum. Proboscis non conspicua. Palpi pilosi, brevissimi. Antennæ late pectinatæ, thorace non longiores. Abdomen alas posticas non superans. Pedes sat graciles; tibiæ posticæ calcaribus duobus minimis apicalibus. Alæ vix latæ; anticæ apud costam subrectæ, apice rotundatæ, margine exteriore perobliquo.

Male. Body moderately stout. Proboscis not visible. Palpi pilose, very short. Antennæ deeply pectinated, not longer than the thorax. Abdomen extending as far as the hind wings. Legs rather slender; hind tibiæ with two very minute apical spurs. Wings hardly broad. Fore wings almost straight along the costa, rounded at the tips, very oblique along the exterior border; interior angle rounded; first and second inferior veins approximate at the base; third much more than twice further from the fourth than from the second.

1. NATAXA FLAVIFASCIA.

Mas. *Ferrugineo-rufa; abdomen nigro-fuscum, apice ferrugineo-rufum; alæ nigro-fuscæ, apud marginem exteriorem saturate rufæ, fuscia gracili obliqua subundulosa flava; posticæ subtus rufæ.*

Ferruginous-red, paler beneath. Abdomen blackish brown, ferruginous-red at the tip. Wings blackish brown, deep red towards the exterior border, with a slender oblique slightly undulating yellow band, which is clavate towards the costa of the fore wings. Hind wings wholly red on the under side, with the exception of the yellow band. Length of the body 4½ lines; of the wings 12 lines.

a. Van Dieman's Land. Presented by — Walcott, Esq.

Genus 15. APHA.

Mas. Corpus sat gracile. Proboscis capitis latitudine non longior. Palpi mediocriter longi, subarcuati, oblique ascendentes, caput paullo superantes; articulus 3us minimus. Antennæ sat late pectinatæ, corporis dimidio breviores. Pedes breves, validi, pilosi; tibiæ posticæ calcaribus duobus apicalibus longiusculis. Alæ latissime, dense pilosæ; anticæ subacuminatæ, vix falcatæ.

Male. Body rather slender. Proboscis not longer than the breadth of the head. Palpi pilose, moderately long, slightly curved, obliquely ascending, extending a little beyond the head; second joint very much longer than the first; third very minute. Antennæ rather deeply pectinated, full one-third of the length of the body. Abdomen not extending near so far as the hind wings. Legs short, stout, pilose; hind tibiæ with two rather long apical spurs. Wings very broad, thickly clothed. Fore wings very slightly acuminated at the tips, hardly falcate, with the costa convex towards the tips; three inferior veins; second about thrice further from the third than from the first.

1. Apha subdives.

Mas. *Cervina; alæ fascia obliqua recta intus fusca extus testacea strigisque nonnullis angulosis; anticæ gutta discali costaque fuscis, hac cinereo fasciata, striga exteriore viridescente fasciaque apud marginem exteriorem duplicata angulosa ferruginea; posticæ extus testaceæ.*

Male. Fawn-colour. Antennæ ferruginous. Wings with a straight oblique band, which extends from near the tips of the fore wings to the interior border of the hind wings opposite the tip of the abdomen; its inner side is brown, its outer testaceous; on its inner side it is accompanied by four slight zigzag bands; these are most developed on the fore wings; the outer pair are grayish, the inner pair tawny. Fore wings with a brown dot in the disk near the costa,

which is brown with gray bands; near its tip there is a jagged streak, coloured like the straight band, with which it forms an acute angle; the wing on the outside of the above band is greenish, and between it and the exterior border there is a double ferruginous zigzag band. Hind wings testaceous beyond the straight band, and with two rows of small ferruginous spots; under side of the wings with the fawn-colour and testaceous replaced by luteous; the bands reddish ferruginous, disposed much like those on the upper side. Length of the body 8—11 lines; of the wings 28—34 lines.

Var. β. Fore wings mostly grayish brown within the straight band; the tawny and ferruginous marks mostly replaced by brown; under side also darker coloured.

a, *b*. Silhet. From Mr. Sowerby's collection.

Genus 16. OXYTENIS.

Mas. Corpus sat gracile. Proboscis brevis, distincta. Palpi validi, porrecti, subascendentes, caput superantes; articulus 3us minimus. Antennæ mediocriter pectinatæ, thorace longiores. Pedes validi; tibiæ posticæ calcaribus quatuor longissimis. Alæ latissimæ; anticæ apud costam valde convexæ, apice falcatæ, margine exteriore subconvexo et subobliquo; posticæ latiores; abdomen longe superantes.

Syssaura, p., *Hübn. Verz. Schmett.* 150.
Oxytenis, *Hübn. Verz. Schmett.* 150.

Male. Body rather slender. Proboscis short, distinct. Palpi stout, porrect, pilose, slightly ascending, extending some distance beyond the head; third joint very minute. Antennæ moderately pectinated, rather longer than the thorax. Abdomen extending to half the breadth of the hind wings. Legs stout, clothed with short hairs; hind tibiæ with four very long spurs. Wings very broad. Fore wings very convex along the costa, falcate at the tips, slightly convex and oblique along the exterior border; interior angle much rounded; three inferior veins; first and second contiguous at the base; third remote. Hind wings much broader than the fore wings.

This genus has some affinity to the *Saturnidæ*, and also to the *Geometrites*.

1. Oxytenis Zerbina.

Mas. *Cervina; palpi fusci; pedes fasciis nigricantibus; alæ ex parte luteo flavæ fascia angusta obliqua fuscescente, extus cinereæ fasciis duabus undulosis nigricantibus spatioque intermedio rufescente; posticæ fascia basali nigricante.*

Phalæna Attacus Zerbina, *Cram. Pap. Exot.* iii. 171, pl. 287, f. 3.
Syssaura Zerbina, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Falcatæ*), 150, 1574.

Male. Fawn-colour. Palpi brown. Antennæ testaceous. Legs with blackish bands, which are most prevalent on the fore legs. Wings, especially the fore wings, partly luteous-yellow, with a very slender oblique brownish band, which extends from the tips of the fore wings to somewhat beyond the middle of the interior border of the hind wings; the wings from just beyond this band to the exterior border are gray, with two slender undulating blackish bands, which include a reddish space. Hind wings with a blackish band, which is near the base, and appears on the interior border of the fore wings; interior border ciliated. Length of the body 5—7 lines; of the wings 24—30 lines.

Var. β. Wings paler, with very little fawn-colour.

a. Parà. Presented by Gordon Graham, Esq.
b. Venezuela. From Mr. Dyson's collection.

2. Oxytenis honesta.

Mas. *Ferruginea, nigro punctata; alæ fasciis duabus perobliquis, antica angusta saturate ferruginea, postica nigricante extus repanda; alæ anticæ maculis tribus discalibus nigricantibus strigaque subapicali nigra.*

Phalæna Attacus honesta, *Cram. Pap. Exot.* iv. 25, pl. 302, f. C. D.
Syssaura honesta, *Hübn. Verz. Schmett.* 150, 1575.

Male. Ferruginous, sprinkled with black. Wings with two very oblique bands; the fore one dark ferruginous, very narrow; the hind one blackish, diffuse exteriorly. Fore wings with three blackish discal spots, and with a black subapical streak along the exterior border. Under side more luteous; wings hindward grayish brown; fore wings with a black band bordering the brown part; hind wings with a black discal dot.

Surinam.

3. Oxytenis modesta.

Ferruginea; alæ fascia arcuata basim versus intus albo marginata in anticis ex parte duplicata, maculis submarginalibus nigricantibus; subtus luteæ postice ferrugineæ nigro maculatæ anticæ fascia fusca lunulis duplicatis albis interlineata, posticæ fasciis duabus, la tenui fusca, altera latiore nigricante extus albido marginata.

Phalæna Attacus modesta, *Cram. Pap. Exot.* iii. 143, pl. 272, f. C. D.

Oxytenis modestia, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Falcatæ*), 150, 1578.

Surinam.

4. Oxytenis peregrina.

Mas. *Fusca; alæ albo fuscoque conspersæ, strigis transversis nonnullis basim versus undulosis fasciaque recta duplicata exteriore obscure fuscis, macula discali nigra, margine exteriore ferrugineo lunulis fuscis; anticæ plagis duabus magnis indistinctis obscure fuscis.*

Phalæna Attacus Peregrina, *Cram. Pap. Exot.* iv. 30, pl. 305, f. A.
Oxytenis Peregrina, *Hübn. Verz. Schmett.* 150, 1577.

Male. Brown. Wings sprinkled with white towards the base, and with dark brown, with some undulating transverse dark brown streaks near the base, with a black spot on each disk, with a double straight dark brown band extending from the tips of the fore wings to two-thirds of the interior border of the hind wings; beyond this band the wings are ferruginous, with various brown lunules. Fore wings with two large indistinct dark brown patches.

Surinam.

5. Oxytenis Lamis.

Fusca; alæ anticæ basi et apud marginem exteriorem anticum obscuriores, fasciis sex incompletis undulosis aut angulosis pallidioribus, macula subapicali cinerea; posticæ pallide fuscæ, fasciis duabus arcuatis obscurioribus.

Phalæna Attacus Lamis, *Cram. Pap. Exot.* iv. 149, pl. 367, f. G.
Oxytenis Lamis, *Hübn. Verz. Schmett.* 150, 1579.

Brown. Fore wings dark brown at the base, at the tips, and along the adjoining part of the exterior border; six paler incomplete undulating or angular bands; a gray spot behind each tip. Hind wings pale brown, with two brown curved bands.

Surinam.

Genus 17. TERATOPTERIS.

Mas. Corpus gracillimum. Proboscis non conspicua. Palpi validi, pilosi, subascendentes, caput superantes; articulus 3us obtusus, minimus. Antennæ mediocriter pectinatæ, thorace paullo longiores. Pedes validi, pilosi, calcaribus sat longis. Alæ latissimæ, non longæ; anticæ apud costam valde convexæ, apice subfalcatæ, margine exteriore obliquo exciso; posticæ latiores, margine exteriore antice exciso postice quasi truncato; posticæ abdomen longe superantes.

Teratopteris, *Hübn. Verz. Schmett.* 151.

Male. Body very slender. Proboscis not visible. Palpi stout, pilose, somewhat ascending, extending some distance beyond the head; third joint obtuse, very small. Antennæ moderately pectinated, a little longer than the thorax. Abdomen extending to rather beyond half the breadth of the hind wings. Legs stout, pilose; hind tibiæ with two (or four?) spurs of moderate length. Wings very broad, not long. Fore wings very convex in front, slightly falcate at the tips, oblique and irregularly notched along the exterior border; interior angle distinct, obtuse; three inferior veins; second much further from the third than from the first. Hind wings much broader than the fore wings, notched along the anterior half of the exterior border, whose hind half is square, and forms a right angle with the interior side.

1. Teratopteris ferruginea.

Mas. *Ferruginea; palpi supra fusci; pectus et abdomen subtus testacea; pedes fulvi, ferrugineo fasciati; alæ fascia obliqua gracillima subangulosa fusca.*

Male. Ferruginous. Palpi brown above. Antennæ testaceous. Pectus and abdomen beneath pale testaceous. Legs tawny, with ferruginous bands. Wings with one oblique very slender and somewhat angular brown band, which extends from the tips of the fore wings to the disk of the hind wings, where it forms a slightly acute angle, and proceed thence to two-thirds of the length of the

interior border in a line parallel to the hinder half of the exterior border; under side paler. Length of the body 7 lines; of the wings 24 lines.

a. Venezuela. From Mr. Dyson's collection.

2. TERATOPTERIS ANGULATA.

Fusca; alæ anticæ obscure fuscæ, costa fasciaque lata submarginali antice furcata cervinis, vitta subcostali maculaque exteriore glaucescentibus, macula antica strigaque postica margineque exteriore luteis; posticæ fasciis duabus abbreviatis margineque anteriore luteis, striga interiore margineque exteriore glaucescentibus.

Phalæna Attacus angulata, *Cram. Pap. Exot.* i. 96, pl. 61, f. E, F.
Bombyx angulata, *Fabr. Sp. Ins.* ii. 172, 26; *Mant. Ins.* ii. 110, 29; *Ent. Syst.* iii. 1, 418, 34. *Gmel. ed. Syst. Nat.* i. 5, 2406, 475.
Teratopteris harpago, *Hübn. Verz. Schmett.* 151, 1583.
Surinam.

Genus 18. DRACONIPTERIS.

Corpus gracile. Proboscis brevis, distincta. Palpi validi, arcuati, ascendentes, longiusculi. Antennæ mediocriter pectinatæ, thorace paullo longiores. Pedes validi, pilosi. Alæ latæ; anticæ longiusculæ, falcatæ, apud costam convexæ, margine exteriore inciso perobliquo; posticæ multo latiores, abdomen longe superantes.

Draconipteris, p., *Hübn. Verz. Schmett.* 150.

Body slender. Proboscis short, distinct. Palpi stout, curved, pilose, ascending, rather long, extending to the vertex. Antennæ moderately pectinated, a little longer than the thorax. Abdomen extending to rather beyond half the breadth of the hind wings. Legs stout, pilose. Wings broad. Fore wings rather long, convex along the costa, much hooked at the tips, very oblique and with two long shallow excavations along the exterior border; interior angle obtuse, well defined; three inferior veins; second further from the third than from the first. Hind wings much broader and shorter than the fore wings, convex along the exterior border, which forms a right angle with the straight interior border.

This genus has some affinities with the *Saturnidæ* and the *Geometrites*.

1. Draconipteris mirabilis.

Mas. *Testaceo-flava; palpi supra fusci; abdomen apice subtus ferrugineum; pedes ex parte fusci; alæ ex parte testaceo-flavæ vitta obliqua perangusta fusca, anticæ cervinæ linea albida guttisque tribus nigris albo cinctis; posticæ ferrugineæ guttis exterioribus nigricantibus.*

Phalæna Attacus mirabilis, *Cram. Pap. Exot.* iii. 143, pl. 272, f. B.

Draconipteris mirabilis, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Platypterices Dentatæ*), 150, 1580.

Surinam.

Male. Testaceous-yellow. Palpi brown above. Abdomen ferruginous beneath towards the tip. Legs partly brown. Wings testaceous-yellow for a space on each side of the thorax and of the base of the abdomen; this hue having a subquadrate form, and occupying more than one-third of the length of the fore wings and the base of the hind wings; a very slender brown stripe, which extends from the tips of the fore wings to a little beyond one-third of the breadth of the hind wings. Fore wings with a whitish line between the above-mentioned stripe and the exterior border, accompanied by three white-bordered black dots at its hind end. Fore wings elsewhere fawn-colour. Hind wings ferruginous, paler behind, with a row of blackish dots near the exterior border; under side as in the fore wings much darker, and with a white spot by the tip of the costa. Length of the body 9 lines; of the wings 32 lines.

a. Demerara. From Mr. Children's collection.

Genus 19. CRICULA.

Proboscis brevis, distincta. Palpi brevissimi. Antennæ thorace paullo breviores. Pedes validi, pilosi; tarsi breves, robusti; tibiæ posticæ calcaribus duobus apicalibus minimis. Alæ latæ; anticæ apud costam subconvexæ, apice falcatæ, margine exteriore obliquo; posticæ abdomen superantes. *Mas.*—Antennæ latissime pectinatæ. Abdomen sat gracile. Alæ anticæ valde falcatæ, apud marginem exteriorem concavæ; posticæ abdomen longe superantes. *Fœm.*—Antennæ subpectinatæ. Alæ anticæ vix falcatæ, margine exteriore subrectæ; posticæ abdomen paullo superantes.

Proboscis short, distinct. Palpi pilose, very short. Antennæ a little shorter than the thorax. Abdomen not extending so far as the

hind wings. Legs stout, pilose; tarsi short, thick; hind tibiæ with two very small apical spurs. Wings broad. Fore wings slightly convex along the costa, falcate at the tips, oblique along the exterior border; interior angle rounded; three inferior veins; second as near to the third as to the first. *Male.*—Antennæ very deeply pectinated; the branches on each side in pairs of equal length. Abdomen rather slender, extending to two-thirds of the breadth of the hind wings. Fore wings much hooked at the tips, concave along the exterior border. Hind wings shorter, broader, and more rounded at the tips than those of the female. *Female.*—Antennæ minutely pectinated; the branches on each side stout and single. Abdomen extending to five-sixths of the breadth of the hind wings. Fore wings very slightly falcate at the tips, nearly straight along the exterior border.

This genus unites the *Drepanulidæ* and the *Saturniidæ*, being apparently as nearly allied to the latter as to the former.

1. Cricula trifenestrata.

Alæ fascia gracili obliqua subrecta cinerea; anticæ fascia gracili basim versus posticæque fascia exteriore cinerea angulosa. Mas.—*Testaceo-lutea; alæ anticæ guttis duabus minutis vitreis, posticæ gutta discali nigricante.* Fœm.—*Ferrugineo-lutea; alæ anticæ maculis tribus, posticaque una discalibus vitreis.*

Saturnia trifenestrata, *Helfer, Journ. Asiatic Soc. Bengal*, vi. 45, 10.

Wings with a slender oblique nearly straight gray band, which extends from the tips of the fore wings to rather beyond one-third of the interior border of the hind wings. Fore wings with a slender gray zigzag band near the base. Hind wings with an exterior slender zigzag gray band. *Male.*—Testaceous-luteous. Fore wings with two minute vitreous dots. Hind wings with a blackish discal dot between the two bands. *Female.*—Ferruginous-luteous. Fore wings with three discal vitreous spots, which are very variable as to size. Hind wings with a discal vitreous dot. Length of the body 9—13 lines; of the wings 30—40 lines.

a. East Indies. From Archdeacon Clerk's collection.
b, *c*. Java. From the East India Company's collection.
d, *e*. Java. From Mrs. Henry's collection.
f. Java. From Mr. Children's collection.
g. Java. From Mr. Argent's collection.
h. Silhet. From the Rev. J. Stainforth's collection.
i. Silhet. From Mr. Argent's collection.
j, *k*. North India. From Mr. James' collection.
l. ———?

Genus 20. TAGORA.

Proboscis non conspicua. Palpi porrecti, validi, pilosissimi, caput paullo superantes; articulus 3us minimus. Antennæ thorace longiores. Pedes validi, pilosi; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ latæ; anticæ apud costam subrectæ, apice vix falcatæ, margine exteriore subobliquo vix convexo. *Mas.*—Antennæ late pectinatæ. Abdomen sat gracile. *Fœm.*—Antennæ vix pectinatæ. Abdomen validum.

Proboscis not visible. Palpi stout, porrect, very pilose, extending a little beyond the head; third joint very minute. Antennæ longer than the thorax. Abdomen not extending so far as the hind wings. Legs stout, pilose; hind tibiæ with two small apical spurs. Wings broad. Fore wings almost straight along the costa till near the tip of the latter, where they are slightly convex, hardly hooked at the tips; slightly oblique and hardly convex along the exterior border; interior angle rounded; three inferior veins; second much further from the third than from the first. *Male.*—Antennæ deeply pectinated. Abdomen rather slender. *Female.*—Antennæ very minutely pectinated. Abdomen rather stout.

1. TAGORA GLAUCESCENS.

Mas. *Ferrugineo-fusca; palpi supra nigricantes; antennæ latissime pectinatæ; alæ obscure fuscæ glaucescentes, basi ferrugineo-fuscæ, fasciis nonnullis nigricantibus unaque obliqua fere recta ferruginea nigro marginata; anticæ gutta discali flava; posticæ abdomen vix superantes.*

Male. Ferruginous-brown. Palpi above and antennæ blackish, the latter very deeply pectinated. Wings above dark brown, ferruginous-brown towards the base, with glaucous reflexions, which are most prevalent towards the exterior border; some slight undulating blackish bands, and a more distinct nearly straight oblique ferruginous band, which is bordered with black on each side, and extends from the tips of the fore wings to two-thirds of the length of the interior border of the hind wings; under side with a submarginal band of glaucous lunules. Fore wings with a yellow discal dot. Hind wings extending very little beyond the abdomen. Length of the body 15 lines; of the wings 36 lines.

a. Himalaya Mountains. From Capt. Parry's collection.

2. TAGORA PATULA.

Fœm. *Cinereo-cervina; antennæ thorace multo longiores; alæ fasciis plurimis subundulosis fuscis duabusque saturatioribus, una fusca, altera ferruginea fusco marginata; anticæ maculis duabus vitreis discalibus; posticæ abdomen paullo superantes.*

Female. Cinereous fawn-colour. Antennæ very much longer than the thorax. Abdomen extending to three-fourths of the breadth of the hind wings. Wings with numerous slight undulating brown bands, and with two more distinct bands; the first brown, extending from behind the vitreous spots of the fore wings to one-fourth of the length of the interior border of the hind wings; the second ferruginous, bordered with brown on each side, extending from near the tip of the costa of the fore wings to three-fourths of the interior border of the hind wings, curved inward in the fore wings, undulating in the hind wings, under side paler; the first band obsolete; the second cinereous, less curved than it is above in the fore wings, nearly straight in the hind wings; between the second band and the exterior border there is a deeply zigzag cinereous band, which has a blackish border along its outer side, and is indistinctly apparent above. Fore wings with two vitreous discal spots. Length of the body 16 lines; of the wings 52 lines.

a. Silhet. Presented by E. Doubleday, Esq.

3. TAGORA AMÆNA.

Flava; alæ fasciis plurimis angustis angulosis fasciaque una rufescentibus maculisque nonnullis exterioribus fuscis quarum duabus ex parte albo marginatis; posticæ abdomen longe superantes. Mas.—*Antennæ late pectinatæ; alæ anticæ subtus apud costam ferrugineæ.* Fœm.—*Corpus ex parte rufescens.*

Yellow. Abdomen extending to two-thirds of the breadth of the hind wings. Wings with many slender zigzag reddish bands, which are almost obsolete in the male, and with some brown exterior spots which are darker and more numerous in the male than in the female, and especially so on the under side; two of these spots near the tips are partly bordered with white; a reddish band extends from near the tip of the costa to three-fourths of the length of the interior border of the fore wings, and in the male is continued thence to two-thirds of the interior border of the hind wings. *Male.*—Antennæ deeply pectinated. Fore wings ferruginous beneath along

more than half the length of the costa from the base. *Female.*— Body partly reddish. Length of the body 9—10 lines; of the wings 34—36 lines.

a, *b*. Java. From the East India Company's collection.

Genus 21. GANISA.

Mas. Corpus sat robustum. Proboscis non conspicua. Palpi breves, validi, ascendentes; articulus 3us minimus. Antennæ sat late pectinatæ, thorace paullo longiores. Alæ latæ; anticæ apud costam vix convexæ, apice angulatæ, margine exteriore recto subobliquo, interiore ciliato; posticæ apud apices subtruncatæ, abdomen superantes.

Male. Body moderately stout. Proboscis not visible. Palpi short, stout, ascending, pilose; first joint very short; third very small. Antennæ rather deeply pectinated, a little longer than the thorax. Abdomen extending to two-thirds or three-fourths of the breadth of the hind wings. Wings broad. Fore wings slightly convex along the costa, angular at the tips; exterior border straight, slightly oblique; interior angle rounded; interior border ciliated; first and second inferior veins contiguous at the base; third much nearer to the second than to the fourth. Hind wings rounded, and almost truncated at the tips, straight along the exterior border, which forms a sharp and almost right angle with the interior border.

1. Ganisa postica.

Mas. *Fusca; thoracis discus et alæ glaucescentia; alæ anticæ gutta discali nigra fasciisque plurimis linearibus undulosis obscure fuscis; posticæ fusciis nonnullis undulosis strigaque exteriore obscure fuscis.*

Male. Brown, paler beneath. Disk of the thorax and wings with a slight glaucous tinge. Fore wings with a black discal dot, around which the glaucous hue is most conspicuous; two broad darker brown bands, each composed of several slight undulating bands, one between the discal dot and the base of the wing, the other beyond the discal dot; beyond this outer band there is a darker brown more distinct and hardly curved oblique band, which is intersected by a glaucous line and disappears towards the costa; under side with the first and third bands obsolete, the second band more diffuse; a black discal dot near the base. Hind wings with a brown band corresponding to the first one of the fore wings, and

with an exterior brown streak, which proceeds almost straight across the wing and is obsolete towards the exterior border; under side like that of the fore wings, the discal dot more distinct. Length of the body 9 lines; of the wings 17 lines.

a. Ceylon. Presented by R. Templeton, Esq.

2. GANISA PLANA.

Mas. *Cinereo-fusca; antennæ testaceæ; alæ glaucescentes fasciis plurimis linearibus undulosis obliquis fuscis; anticæ fascia angusta duplicata fusca; posticæ fascia unica extus e guttis fuscis marginata.*

Male. Cinereous-brown, a little paler beneath. Antennæ testaceous. Wings with glaucous reflections, and with numerous slender undulating oblique brown bands, which are less apparent on the upper side of the hind wings; under side with a brown discal dot on each wing. Fore wings with a slender double brown band, which extends from the tips to a little before two-thirds of the interior border. Hind wings with a slender and sometimes obsolete brown band which is near the exterior border, and has a row of minute brown dots along its outer side. This species much resembles *G. postica*, but may be distinguished by the straight band of the fore wings by the band of the hind wings, which in *G. postica* is further from the exterior border, and not accompanied by brown dots, and by the form of the hind wings, which in *G. plana* are more oblique and less convex along the fore part of the exterior border. Length of the body 8—9 lines; of the wings 26—28 lines.

a—*c*. Silhet. From the Rev. J. Stainforth's collection.
d, *e*. Silhet. Presented by E. Doubleday, Esq.

Genus 22. LONOMIA.

Corpus sat robustum. Proboscis non conspicua. Palpi validi, ascendentes, verticem non attingentes; articulus 3us obtusus, minimus. Antennæ thoracè non longiores. Pedes validi, pilosissimi; tibiæ posticæ calcaribus duobus minutis apicalibus. Alæ latæ; anticæ apud costam subconvexæ, margine exteriore subobliquo; posticæ abdomen longe superantes.

Male. Body moderately stout. Proboscis not visible. Palpi stout, pilose, ascending, not extending to the vertex; third joint obtuse, very small. Antennæ not longer than the thorax. Abdomen

extending to about two-thirds of the breadth of the hind wings. Legs stout, very pilose; hind tibiæ with two minute apical spurs. Wings broad. Fore wings slightly convex along the costa, forming a right angle at the tips, slightly oblique and nearly straight along the exterior border; interior angle rounded; three inferior veins; second about twice further from the third than from the first. Hind wings much broader than the fore wings; exterior border very obtusely angular in its middle, forming a right angle with the interior border.

Div. I.

Mas. Antennæ mediocriter pectinatæ, thoracis longitudine. Alæ non longæ; anticæ vix falcatæ, margine exteriore fere recto; posticæ multo latiores.

Male. Antennæ moderately pectinated, as long as the thorax. Wings not long. Fore wings hardly falcate, almost straight along the exterior border. Hind wings much broader than the fore wings.

Fœm.? Antennæ vix pectinatæ. Alæ anticæ paullo longiores et acutiores, margine exteriore magis obliquo; posticæ angustiores, margine exteriore non angulato.

Female? Antennæ very minutely pectinated. Abdomen extending to five-sixths of the breadth of the hind wings. Fore wings rather longer, more acute at the tips, and more oblique along the exterior border than those of the male. Hind wings narrower; exterior border not angular.

1. Lonomia submacula.

Mas. *Cervina; alæ fusco conspersæ fasciisque duabus fuscis; anticæ guttis duabus discalibus fusco marginatis; posticæ maculis nonnullis variis pallidioribus, apices versus ex parte cinereæ.*

Male. Fawn-colour, rather paler beneath. Wings speckled with brown, and with two brown bands; first band near the base, curved, slightly undulating; second almost straight, extending from the tips of the fore wings to the middle or beyond one-third of the interior border of the hind wings. Fore wings with two whitish brown-bordered discal dots, one behind the other. Hind wings partly cinereous beyond the outer band, with some paler marks of various size and shape; under side with a dark brown discal dot. Length of the body 8—10 lines; of the wings 22—32 lines.

Var. β. Exterior band of the fore wings bordered with yellow on the inner side.

Var. γ. Fore wings with some exterior pale spots like those of the hind wings.

Var. δ. Bands on the hind wings more strongly marked than on the fore wings.

a, *b*. Rio Janeiro. From Mr. Stevens' collection.
c, *d*. Brazil. From M. Becker's collection.
e. Brazil. From Mr. Children's collection.

Fœm.? *Pallide cinerea; antennæ vix pectinatæ; alæ fusco conspersæ fasciaque angusta recta obliqua fusca intus cano marginata, fasciisque duabus subobsoletis; anticæ macula discali fusca; posticæ abdomen vix superantes.*

Female? Pale cinereous. Wings minutely and rather thickly flecked with brown, and having a slender straight oblique brown band, which has a hoary border on its inner side, and extends from the tips of the fore wings to somewhat beyond the middle of the interior border of the hind wings; two other very indistinct bands, one near the base, the other near the exterior border. Fore wing with a brown discal spot, which is straitened in the middle. Length of the body 10 lines; of the wings 32 lines

a. Brazil. From M. Becker's collection.

Div. II.

Fœm. Corpus sat robustum. Caput et thorax lanuginosa. Antennæ vix pectinatæ, thorace paullo breviores. Alæ latæ, sat longæ; anticæ apud costam subconvexæ, apice falcatæ, margine exteriore subobliquo vix convexo; posticæ latiores, abdomen longe superantes.

Female. Body rather stout. Head and thorax lanuginose. Antennæ hardly pectinated, a little shorter than the thorax. Abdomen extending to about two-thirds of the breadth of the hind wings. Wings broad, rather long. Fore wings slightly convex along the costa, falcate at the tips, slightly oblique and very slightly convex along the exterior border; interior angle rounded; three inferior veins; second about twice further from the third than from the first. Hind wings broader than the fore wings; exterior border hardly angular.

2. LONOMIA APICALIS.

Fœm. Subpurpureo-cervina ; alæ fasciis duabus angustis fuscis, 1a arcuata et angulosa, 2a margine extus pallidiore, fasciaque diffusa angulosa pallida.

Female. Lilac fawn-colour. Wings with two slender brown bands; the first at one-fourth of the length of the wing, curved and zigzag; the second extending from the tips of the fore wings to a little beyond the middle of the interior border of the hind wings; its outer side is deeply but irregularly bordered with paler brown, and between the latter and the exterior border there is an irregular diffuse zigzag pale band. Length of the body 10 lines; of the wings 38 lines.

a. Rio Janeiro. From Mr. Stevens' collection.
b, c. Rio Janeiro. From Mr. Children's collection.

3. LONOMIA OBLIQUA.

Fœm. *Testaceo-cervina ; thorax posticus et abdomen albido-testacea ; tibiæ tarsique fusca ; alæ fascia angusta subrecta perobliqua fusca intus albido marginata, extus cinerascentes, anticæ guttis duabus discalibus fuscis.*

Female. Testaceous fawn-colour. Abdomen and hind part of the thorax whitish testaceous. Tibiæ and tarsi brown. Wings with a slender almost straight very oblique brown band, which has a whitish border on the inner side, and extends from the tips of the fore wings to the middle of the interior border of the hind wings; the wings along the outer side of this band are grayish, which hue is separated from the fawn-colour between it and the exterior border by an irregular undulating line. Fore wings with two brown discal dots, one behind the other. Length of the body 10—11 lines; of the wings 34—40 lines

a. Brazil. Presented by E. Doubleday, Esq.
b. Rio Janeiro. From Mr. Stevens' collection.
c. Brazil. From Mr. Argent's collection.

4. LONOMIA ALBIGUTTA.

Mas. *Ochracea ; antennæ testaceæ ; tibiæ tarsique cinerea ; alæ fascia angusta obliqua fusca, subtus nigro guttatæ ; anticæ vix falcatæ, albo biguttatæ.*

Male. Ochraceous. Antennæ testaceous. Tibiæ and tarsi gray. Abdomen extending to about two-thirds of the breadth of the hind wings. Wings with a slender brown band, which extends from near the tips of the fore wings to half the length of the interior border of the hind wings, and has a pale inner border; under side with a few black dots of various size, and with a very indistinct pale submarginal band. Fore wings hardly falcate, with two white discal dots, the one behind the other. Length of the body 9 lines; of the wings 28 lines.

Brazil. In Mr. Saunders' collection.

Genus 23. THENOPA.

Mas. Corpus sat gracile. Proboscis non conspicua. Palpi porrecti, sat graciles, caput perpaullo superantes; articulus 3us longiconicus, acutus. Antennæ subpectinatæ, thorace non longiores. Abdomen alas posticas longe superans. Pedes graciles, subnudi; tibiæ posticæ calcaribus duobus parvis apicalibus. Alæ angustæ; anticæ longiusculæ, apud costam rectæ, apice rotundatæ, margine exteriore unduloso perobliquo.

Male. Body rather slender. Proboscis not visible. Palpi porrect, rather slender, extending very little beyond the head; third joint elongate-conical, acute. Antennæ slightly pectinated, as long as the thorax. Abdomen extending for nearly half its length beyond the hind wings. Legs slender, nearly bare; hind tibiæ with two small apical spurs. Wings narrow. Fore wings rather long, straight in front, rounded at the tips, undulating and extremely oblique along the exterior border; interior angle rounded; three inferior veins; second about four times further from the third than from the first.

1. THENOPA DIVERSA.

Mas. *Lutea; palpi rufescentes; abdomen supra fuscum; alæ fuscæ, fascia lata lutea, subtus apice ferrugineæ.*

Male. Luteous. Palpi reddish. Abdomen brown above. Wings brown, with a broad luteous band, which extends from about the middle of the costa of the fore wings to two-thirds of the length of the interior border of the hind wings; under side ferruginous at the tips. Length of the body 5 lines; of the wings 11 lines.

a. ——— ? Presented by E. Doubleday, Esq.

ADDENDA TO THE DREPANULIDÆ.

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CRICULA TRIFENESTRATA.

Saturnia trifenestrata, *Herr.-Schæff. Lep. Exot. Sp. Ser.* I, pl. 17, f. 80.

Phalæna-Bombyx Attacus fenestra? *Linn. Syst. Nat.* i. 2, 811, 9; *Mus. Lud. Ulr.* 372. *Clerck, Icon.* pl. 55, f. 1. *Gmel. ed. Syst. Nat.* i. 5, 2407, 9.

Bombyx fenestra? *Fabr. Sp. Ins.* ii. 170, 18; *Mant. Ins.* ii. 109, 20; *Ent. Syst.* iii. 1, 414, 25. *Oliv. Enc. Méth. Ins.* v. 30, 23.

Phalæna-Bombyx Attacus perspicua? *Linn. Syst. Nat.* i. 2, 811, 10; *Mus. Lud. Ulr.* 373. *Gmel. ed. Syst. Nat.* i. 5, 2407, 10.

Bombyx perspicua? *Fabr. Sp. Ins.* ii. 171, 21; *Mant. Ins.* ii. 109, 23; *Ent. Syst.* iii. 1, 415, 28.

East Indies.

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TAGORA UNDULOSA.

Fœm. *Cervina; antennæ nigræ; tibiæ tarsique supra nigricantia; alæ strigis plurimis undulosis obscurioribus, fascia angusta duplicata guttisque submarginalibus fuscis; anticæ subfalcatæ, gutta discali vitrea.*

Female. Fawn-colour. Antennæ black. Tibiæ and tarsi blackish above. Abdomen extending to rather beyond three-fourths of the breadth of the hind wings. Wings with numerous slight brownish undulating streaks, and with a slender double darker brown band which extends from very near the tips of the fore wings

to rather beyond three-fourths of the interior border of the hind wings; some dark brown dots near the exterior border. Fore wings subfalcate, with a vitreous discal dot. Length of the body 16 lines; of the wings 58 lines.

a. East Indies. From Mr. Argent's collection.

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Genus PERIGA.

Mas. Corpus gracile. Proboscis non conspicua. Palpi porrecti, caput non superantes; articulus 2us 1o plus duplo longior; 3us minutus, brevi-conicus. Antennæ mediocriter pectinatæ, thorace non longiores. Pedes breviusculi, sat pilosi; tibiæ posticæ calcaribus duobus apicalibus minutis. Alæ latissimæ; anticæ apud costam subconvexæ, apice angulatæ, margine exteriore subobliquo; posticæ abdomen longe superantes.

Nearly allied to *Lonomia*. *Male.*—Body slender. Proboscis obsolete. Palpi porrect, moderately long, extending as far as the head; second joint more than twice the length of the first; third minute, short-conical. Antennæ moderately pectinated, not longer than the thorax. Abdomen extending to about two-thirds of the breadth of the hind wings. Legs rather short, moderately pilose; hind tibiæ with two small apical spurs Wings very broad. Fore wings very slightly convex along the costa, forming a slightly acute angle at their tips, slightly oblique along the exterior border; interior angle rounded; three inferior veins; second much further from the third than from the first. Hind wings with the interior angle more defined than that of the fore wings.

1. PERIGA CIRCUMSTANS.

Mas. *Pallide lutea, subtus flava; antennæ testaceæ; alæ nigro conspersæ, nigro trifasciatæ; anticæ nigro biguttatæ aut uniguttatæ.*

Male. Pale luteous, pale yellow beneath. Antennæ testaceous. Wings thinly covered with minute blackish specks, with a curved blackish band at one-fourth of the length, with a straight blackish band which extends from the tip of the fore wing to the middle of the interior border of the hind wing (this band is bordered with yellow on its inner side), and with a diffuse irregular blackish band

between the latter and the exterior margin. Fore wings with two black dots in a transverse line on the disk. Length of the body 9 lines; of the wings 26 lines.

Var. β. Fore wings with one discal dot. Yellow border of the middle band of the hind wings wanting.

Var. γ. Wings varied with yellow. Discal dots of the fore wings replaced by a large imperfect blackish ocellus, which contains two minute white dots.

Rio Janeiro. In Mr. Fry's collection.

Fam. 8. SATURNIIDÆ.

Antennæ capitis latitudine multo longiores. Proboscis sæpissime nulla. Palpi sæpissime brevissimi. Abdomen breve. Pedes validi; tibiæ posticæ calcaribus duobus apicalibus parvis. Alæ plerumque amplissimæ et fenestratæ; anticæ sæpe falcatæ, vena marginis interioris unica. Vena 4a et 5a alarum posticarum origine valde remotæ. Frenulum nullum.

Phalænina Phalænites, *Newman, Ent. Mag.* ii. 383.
Saturnides, *Boisd. Ind. Méth.* 73; *Herr.-Schæff.*
Attacidæ, *Duponch. Cat.* 78.
Bombycidæ Attacidi, *Steph. Cat. Brit. Lep.* 44.

Synopsis of Genera.

A. Abdomen alas posticas non superans.
  A. Alæ anticæ macula vitrea subapicali nulla.
    a. Alæ opacæ.
      a. Proboscis non conspicua.
        i. Alæ anticæ supra ocellatæ.
          * Alæ posticæ non caudatæ.
            † Alæ posticæ *fœminæ* dilatatæ. - 1. ATTACUS.
            †† Alæ posticæ *fœminæ* non dilatatæ.
              ‡ Alæ posticæ non angulatæ.
                § Alæ ocello rotundo.
                  × Alæ non denticulatæ.
                    0 Alæ macula vitrea sæpissime rotunda. - - 7. ANTHERÆA.

00 Alæ macula vitrea sæpissime lineari.
— Alarum ocelli pupillati.
+ Antennæ *maris* ramis non pilosissimis nec æqualiter longis. 11. SATURNIA.
++ Antennæ *maris* ramis duplicatis pilosissimis æqualiter longis.
16. POLYTHYSANA.
= Alarum ocelli non pupillati.
13. PERISOMENA.
000 Alæ macula vitrea nulla.
— Alarum rami duplicati.
2. SAMIA.
= Alarum rami non duplicati.
+ Alæ anticæ non falcatæ.
++ Alæ litura discali angulata. 15. AGLIA.
++++ Alæ lunula discali.
19. HEMILEUCA.
++ Alæ anticæ valde falcatæ.
26. MICRATTACUS.
× Alæ denticulatæ. - 10. GYNANISA.
§§ Alæ ocello falcato. - - 12. RINACA.
§§§ Alæ macula vitrea trigona. - 5. SAGANA.
‡‡ Alæ posticæ angulatæ.
§ Alæ anticæ macula vitrea rotunda.
3. TELEA.
§§ Alæ anticæ macula vitrea quadrata aut nulla. - - - - 4. BUNÆA.
** Alæ posticæ plus minusve caudatæ.
† Alæ anticæ falcatæ. - - 8. TROPÆA.
†† Alæ anticæ non falcatæ. - 9. EUDÆMONIA.
ii. Alæ anticæ supra non ocellatæ.
* Alæ posticæ ocellatæ. - 14. HYPERCHIRIA.
** Alæ posticæ non aut vix ocellatæ.
† Alæ maculis vitreis. - - - 6. COPAXA.
†† Alæ maculis nullis vitreis.
‡ Alæ non denticulatæ.
§ Alæ posticæ non angulatæ nec caudatæ.
31. DIRPHIA.
§§ Alæ posticæ angulatæ aut caudatæ.

× Alæ anticæ fascia apicem versus angulosa.
0. Alæ anticæ apice non truncatæ.
21. Rhescyntis.
00 Alæ anticæ apice truncatæ.
22. Dysdæmonia.
×× Alæ anticæ fascia apicem versus non angulata - - - - 23. Urota.
×××× Alæ anticæ non fasciatæ. 28. Microgone.
‡ Alæ denticulatæ.
§ Alæ posticæ abdomen non superantes.
30. Molippa.
§§ Alæ posticæ abdomen superantes.
29. Cyrtogone.
b. Proboscis conspicua.
i. Alæ ciliis angustis.
* Alæ ocellatæ. - - - - - 17. Giacla.
** Alæ non ocellatæ. - - - - 18. Brahmæa.
ii. Alæ ciliis latis. - - - - - 33. Caloptera.
B. Alæ totæ aut ex parte hyalinæ aut subhyalinæ.
a. Alæ annulatæ. - - - - - 20. Aphelia.
b. Alæ non annulatæ. - - - 25. Heliconisa.
A. Alæ anticæ macula vitrea subapicali. - 24. Henucha.
B. Abdomen alas posticas superans.
A. Alæ posticæ denticulatæ. - - - - 27. Mimallo.
B. Alæ posticæ non denticulatæ. - - - 32. Eacles.

Genus 1. ATTACUS.

Corpus breve, robustum. Palpi breves, validi, caput non superantes; articulus 3us minimus. Antennæ thorace paullo longiores. Abdomen brevissimum. Pedes breves, validi; tibiæ posticæ calcaribus nullis. Alæ maximæ, macula maxima discali vitrea; anticæ falcatæ, margine exteriore unduloso; posticæ latissimæ, abdomen bis triente superantes. *Mas.*—Antennæ latissime pectinatæ. *Fœm.*—Antennæ sat late pectinatæ.

Phalæna-Bombyx Attacus, *Linn., &c.*
Attacus, *Hübn. Verz. Schmett.* 155.
Hyolophora, p., *Duncan, Nat. Libr.* vii.
Attacus, p., *Latr.; Blanch.*

Body stout, short. Palpi short, thick, not extending so far as the head; third joint very small. Antennæ a little longer than the thorax. Abdomen extending to one-third or less of the breadth of the hind wings. Legs short, stout; hind tibiæ without spurs.

Wings very ample, each with a very large vitreous more or less irregularly triangular spot. Fore wings more or less convex in front, very generally more or less falcate at the tips, and more or less undulating and oblique along the exterior border; interior angle rounded; discal areolet open, intersected by a secondary vein; three inferior veins; first and second united at the base; third very remote. Hind wings more or less broader than the fore wings. *Male.*—Antennæ extremely deeply pectinated; branches in pairs, slender, thickly ciliated, opposite each other, very numerous. *Female.*—Antennæ rather deeply pectinated; branches slightly ciliated.

Mexico.

1. Attacus Orizaba.

Alæ anticæ maris *subfalcatæ; posticæ elongatæ; in utroque sexu fulvæ, fusco cinereoque variæ, omnes plaga magna triangulari (in omnibus alis æquali), apice extus in strigam undatam albam intus nigro marginatam, insidente, macula subapicali alarum anticarum e guttis tribus nigris composita, linea tenuissima nigra valde undulata submarginali serie macularum parvarum in alis posticis includente.*

Saturnia Orizaba, *Westw. Ann. Nat. Hist. 2nd Ser.* xv. 294.

Very nearly allied to *A. Aurota.*

Mexico.

Var.? Mas et fœm. *Ferrugineus; thorax albo bifasciatus. A.* Aurotæ *simillimus, fascia exteriore plus undulata, margine purpureo angustiore.*

Male and female. Very much resembles *A. Aurota*, but may be distinguished by the foreside of the interior band of the fore wings, which is much less inclined towards the base of the costa; by the exterior band, which is more deeply undulating, and whose purple outer border is much narrower and less diffuse; by the vitreous spot of the fore wings, which is larger and interrupts the exterior band. Ferruginous. Thorax with a white band in front, and another behind. Wings with the markings and vitreous spots much like those of *A. Aurota.* Length of the body 14 lines; of the wings 66 lines.

a, b. Mexico. Presented by E. Doubleday, Esq.

2. Attacus Jorulla.

Alæ fulvo-fuscæ; anticæ macula subtriangulari, posticæ macula subovali, vitreis albo nigroque marginatis, striga angulata e basi ad costam anticarum, alteraque multidentata (communi) pone medium albis nigro roseoque marginatis; striga tenui, nigra, undata, subapicali, macula tripartita, nigra versus apicem connexa; posticæ serie submarginali macularum rosearum, extus linea undata, nigra e margine cinereo separata.

Saturnia Jorulla, *Westw. Ann. Nat. Hist.* 2nd *Ser.* xv. 296.

Allied to *A. Hesperus.*

Mexico.

3. Attacus? Chapata.

Mas. *Alæ roseo-fulvæ, anticarum costa et prothorax cinerea, omnes ocello medio, magnitudine mediocri, æquali, medio vitreo, intus hepatico, extus flavo, circuloque fusco-cincto; anticæ striga recta valde obliqua pone medium fusca, macula parva nigra subapicali adjecta.*

Saturnia Chapata, *Westw. Ann. Nat. Hist.* 2nd *Ser.* xv. 298.

Mexico.

South America.

A. Alæ rufo-ferrugineæ.
  A. Alæ posticæ macula vitrea trigona.
    a. Alæ posticæ plus dilatatæ. - - - Aurota, *Cram.*
    b. Alæ posticæ minus dilatatæ. - - speculifer, *MSS.*
  B. Alæ posticæ macula vitrea elliptica aut subovata.
    a. Alæ anticæ macula vitrea antice truncata.
      a. Alæ anticæ maculis subapicalibus nullis nigris. Hesperus, *Linn.*
      b. Alæ anticæ apices versus nigro maculatæ. Jacobææ, *MSS.*
    b. Alæ anticæ macula vitrea non antice truncata.
      a. Alæ anticæ fascia exteriore costam versus recta aut subrecta.
        i. Alæ anticæ fascia exteriore costam versus minus obliqua. Arethusa, *MSS.*
        ii. Alæ anticæ fascia exteriore costam versus plus obliqua. Aricia, *MSS.*
      b. Alæ anticæ fascia exteriore costam versus undulosa. Ethra, *Oliv.*
B. Alæ ochraceæ. . . . . Betis, *Walk.*

Group 1.

Antennæ thorace vix longiores. Alæ macula magna trigona vitrea; anticæ subfalcatæ, apud costam subconvexæ, margine exteriore subconcavo; posticæ fere duplo latiores quam longæ; abdomen plus dimidio superantes.

Antennæ hardly longer than the thorax. Abdomen extending to more than one-third of the breadth of the hind wings. Hind tibiæ with two moderately long apical spurs. Wings with a large distinctly triangular vitreous spot. Fore wings convex in front, slightly falcate at the tips, very slightly concave and oblique along the exterior border; spot with the angles somewhat rounded; sides almost straight; interior side slightly indented towards the front. Hind wings nearly twice broader than long, very much broader than the fore wings. *Male.*—Antennæ very deeply pectinated; branches in pairs, stout, thickly ciliated, not opposite each other, much fewer than those of *A. Atlas.*

4. Attacus Aurota.

Alæ falcatæ concolores flavescentes, fascia albida lunulaque disci fenestrata.

Bombyx Aurotus, *Fabr. Mant. Ins.* ii. 108, 3; *Ent. Syst.* iii. 1, 408, 3. *Oliv. Enc. Méth. Ins.* v. 25, 4.

Phalæna-Bombyx Attacus Aurotus, *Gmel. ed. Syst. Nat.* i. 5, 2401, 6.

Phalæna Attacus Aurota, *Cram. Pap. Exot.* i. 11, pl. S. f. A.

Attacus Aurota, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Speculares*), 156, 1627.

Red. Head pale. Abdomen white at the base, and with white bands. Wings with a large irregularly triangular hyaline black-bordered spot on each disk, and in contact with an oblique undulating discal band, which is successively black, white, red and black, with white dots; in contact with the last colour there is a broad deeply serrated rosy band, with white dots; borders brownish. Fore wings at the base with a short broad rosy white-dotted costal stripe, and with a white and black stripe, which forms a nearly right angle, and joins the costa beyond the rosy stripe; also with a testaceous oblique submarginal band, and with a white apical streak, adjoining which there are two black and red ocelli, the hind one incomplete, the fore one rudimentary. Hind wings with a black and white angular subbasal band, and with a submarginal band composed of black testaceous-bordered spots. *Male.*—Vitreous spot in the fore

wings much smaller than that of the female, concave on the interior side.

Var. β. Fem. Vitreous spot of the hind wings interrupting the exterior band.

Var. γ. Fem. Vitreous spot of the fore wings not concave on the inner side.

a, b. Brazil. From Mr. Mornay's collection.
c. Brazil. From Mr. Stevens' collection.
d. Brazil. From Mr. Argent's collection.
e. Guatimala. From M. Sallé's collection.

Group 2.

Antennæ thoracem adæquantes. Alæ macula maxima vitrea; anticæ subfalcatæ, apud costam vix convexæ, margine exteriore subconcavo; posticæ valde latiores quam longæ, abdomen vix plus dimidio superantes, macula vitrea ovali. *Mas.*—Antennæ late pectinatæ.

Antennæ as long as the thorax. Abdomen extending to a little less than half the breadth of the fore wings. Wings ample; each with a very large discal vitreous spot, adjoining to which on the outer side there is a slender oblique vitreous band, which extends from before two-thirds of the length of the costa of the fore wings to beyond two-thirds of the interior border of the hind wings. Fore wings very slightly convex in front, somewhat falcate at the tips, slightly concave, and very oblique along the exterior border; vitreous spot more or less triangular; its longest side hindward, and almost parallel to the costa. Hind wings very much broader than long, very much broader than the fore wings; vitreous spot oval, a little larger than that of the fore wings.

5. Attacus Arethusa.

Cervina; thorax albo bifasciatus; abdomen vitta abbreviata alba; alæ fascia vitrea intus nigro extus fulvo marginata, extus nigro cyaneo rufoque conspersæ; anticæ apud costam cinereæ, fascia basin versus angulata alba nigro ex parte marginata, macula magna subapicali subpurpurea extus albo rufo luteoque necnon macula nigra marginata, margine exteriore testaceo fascia angusta undulosa nigricante; posticæ fascia basim versus obliqua alba, margine exteriore fulvo fascia tenui undulosa maculisque interioribus nigris.

Saturnia Arethusa, *MSS.*

Fawn-colour. Thorax with a white band in front, and another behind. Abdomen with an abbreviated white stripe. Legs partly clothed with white hairs. Wings with the vitreous band bordered with black on the inner side, and with tawny on the outer side; part beyond the band powdered with black, and partly with blue and red. Fore wings gray along the costa, behind which towards the base there is a white band, which forms a slightly acute angle, the fore side of the latter is bordered with black; the hind side forms a continuous stripe with the hind band of the thorax; near each tip a large lilac spot, which on the outer side is bordered with white; the latter hue is bordered with red in front and with luteous behind, and a black spot adjoins the luteous part; exterior border testaceous, with a slender undulating blackish band. Hind wings with a white oblique band near the base; exterior border tawny, with a slender undulating black band, which is accompanied on the inner side by a row of black spots; the latter decrease in size successively hindward. Length of the body 10—15 lines; of the wings 48—60 lines.

Colombia.

a, *b*. Rio Janeiro. From Mr. Stevens' collection.
c. Brazil. From M. Becker's collection.
d. ———? Presented by J. G. Children, Esq.

Group 3.

Antennæ thorace fere longiores. Alæ amplæ, macula maxima trigona fasciaque vitreis; anticæ apud costam convexæ, margine exteriore subobliquo vix concavo; posticæ valde latiores quam longæ, abdomen plus dimidio superantes. *Mas.*—Antennæ late pectinatæ; alæ anticæ vix falcatæ.

Antennæ full as long as the thorax. Abdomen extending to more than one-third of the breadth of the hind wings. Wings ample; each with a very large discal distinctly triangular vitreous spot, and with a vitreous band like that of *A. Arethusa*. Fore wings convex in front, hardly falcate at the tips, hardly concave, and very slightly oblique along the exterior border; vitreous spot with straight sides, forming a right angle towards the costa. Hind wings very much broader than long, very much broader than the fore wings; spot very little larger than that of the fore wings, its sides less straight, and its angles more rounded.

6. Attacus speculifer.

Mas. *Cervinus; thorax albo bifasciatus; abdomen vittis duabus duplicatis lateralibus; alæ fascia vitrea intus nigro extus rufescente marginata, extus subroseæ albo conspersæ, margine testaceo; anticæ apud costam albo conspersæ, fascia basim versus subrecta alba extus nigro marginata, macula subapicali subpurpurea extus albo rufo luteoque necnon macula nigra marginata, fascia apud marginem exteriorem angusta undulosa nigricante; posticæ fascia basim versus albida undulosa obliqua extus nigro marginata, maculisque apud marginem exteriorem oblongis rufo-fuscis intus albida extus luteo marginatis.*

Saturnia speculifera, *MSS.*

Fawn-colour. Thorax with a white band in front and another behind. Abdomen with a double whitish stripe on each side. Legs partly clothed with white hairs. Wings with the vitreous band bordered with black on the inner side, and with reddish on the outer side; part beyond the band pinkish and powdered with white; a broad ferruginous band between the latter hue and the testaceous border. Fore wings powdered with white along the costa, behind which towards the base there is a white band, which forms an almost right angle, and is bordered outwards with black; its hind side almost joins the hind band of the thorax; near each tip a large lilac spot, which on the outer side is bordered with white; the latter hue is bordered with red in front and with luteous behind, and a black spot adjoins the luteous part; exterior border with a slender undulating blackish band. Hind wings with a whitish oblique undulating band near the base, bordered with black on the outer side; exterior border with a row of oblong reddish brown spots, whose borders are whitish on the inner side, and luteous on the outer side. Length of the body 12—16 lines; of the wings 56—64 lines.

This species nearly resembles *A. Arethusa* in colouring, but differs much in the form of the wings and of the vitreous spot.

Var. β. Vitreous spots with the exterior angle more elongated and acute; spot of the fore wings with the interior side slightly concave.

a, *b*. Brazil. From M. Becker's collection.
c. Mexico. From Mr. Glennie's collection.

Group 4.

Antennæ thorace vix breviores. Alæ amplæ, macula maxima cordata fasciaque vitreis; anticæ apud costam convexæ, non falcatæ, margine exteriore subrecto vix obliquo; posticæ valde latiores quam longæ, abdomen plus dimidio superantes. *Mas.*—Antennæ late pectinatæ.

Antennæ almost as long as the thorax. Abdomen extending to somewhat less than half the breadth of the hind wings. Wings ample; each with a very large heart-shaped vitreous spot (whose concave side is towards the base of the wing), and with a vitreous band like that of *A. Arethusa*. Fore wings convex in front towards the tips, which are not falcate, almost straight, and very slightly oblique along the exterior border. Hind wings very much broader than long, very much broader than the fore wings; spot hardly larger than that of the fore wings.

7. Attacus Betis.

Mas. *Ochraceo-fulvus; thorax albo bifasciatus; abdomen fasciis duabus lateralibus duplicatis albidis; alæ fascia vitrea intus nigro extus ochraceo-fulvo marginata, fascia exteriore diffusa nigricante subpurpureo conspersa, margine exteriore testaceo; alæ anticæ apud costam nigricantes albo conspersæ, fascia basim versus angulata extus nigro marginata, maculis duabus subapicalibus una magna subpurpurea altera nigra elongata, fascia exteriore angusta undulosa fusca; posticæ fascia basim versus alba obliqua nigro extus marginata, fasciaque apud marginem exteriorem angusta subrecta fusca maculis rufo-fuscis intus marginata.*

Male. Orange-tawny. Thorax with a white band in front and another behind. Abdomen with a double whitish stripe along each side. Legs partly clothed with white hairs. Wings with the vitreous band bordered with black on the inner side, and with orange-tawny on the outer side; beyond the latter there is a diffuse blackish lilac-powdered band; exterior border testaceous. Fore wings blackish, and powdered with white along the costa, behind which, towards the base, the white band which is common to the species of this genus forms a right angle, and is bordered outwards with black, its hind side almost joining the hind band of the thorax; near each tip a large lilac spot, which is accompanied hindward on the outer side by an elongated black spot; exterior border

with a slender undulating brown band. Hind wings with a white oblique band near the base, bordered with black on the outer side; exterior border with a slender nearly straight brown band, which is accompanied on its inner side by elongated reddish brown spots. Length of the body 15—17 lines; of the wings 60—66 lines.

This species much resembles *A. speculifer* in form, but the hind wings are broader towards the interior angle, the colouring is different, and so also is the shape of the vitreous spots.

Var. β. Wings much brighter orange. Vitreous spot of the hind wings not, or but partly, interrupting the exterior band.

a, *b*. Brazil. From Mr. Stevens' collection.

Var. Mas. *Ochraceus; antennæ fulvæ; thorax antice albo fasciatus; alarum fascia basim versus alba extus fusco marginata, in alis anticis angulata; macula vitrea trigona; fascia exterior pallide ochracea intus albo fuscoque extus nigro marginata; fascia diffusa maculaque subapicalis purpureæ, hæc extus albo marginata; maculæ tres subapicales fuscæ; alæ posticæ maculis submarginalibus elongatis fuscis albido marginatis.*

Male. Orange-colour. Antennæ tawny; the branches in pairs, which are ciliated and of equal length. Thorax with a white band in front. Abdomen extending to somewhat less than half the breadth of the hind wings. Wings with a pale orange band, which is bordered with white and with brown on the inner side, and with a blackish hue on the outer side, where there is an adjoining broad diffuse and indistinct purple band, the latter is bordered with pale brown on the outer side; a paler purple very large costal subapical spot, which is bordered with white on the outer side, where there is one pale and two dark brown spots; vitreous spot triangular, not large, concave on the inner side in the fore wings, interrupting the pale orange band; near the base a white band, which is bordered with brown on the outer side, and in the fore wings forms an acute angle, which is contiguous to the vitreous spot. Hind wings with a submarginal row of elongated whitish-bordered brown spots. Length of the body 11 lines; of the wings 50 lines.

c. Rio Janeiro. From Mr. Stevens' collection.

Group 5.

Antennæ thorace paullo longiores aut breviores. Alæ amplæ, macula maxima vitrea fasciaque semihyalina; anticæ falcatæ, apud costam convexæ, apices versus falcatæ, margine exteriore unduloso perobliquo, macula vitrea subtrigona; posticæ multo latiores quam longæ, macula vitrea subovata, abdomen triente superantes. *Mas.*—Antennæ latissime pectinatæ; alæ anticæ plus falcatæ. *Fœm.*—Antennæ subpectinatæ.

Antennæ rather longer or shorter than the thorax. Abdomen extending to about two-thirds of the breadth of the hind wings. Wings ample; each with a very large vitreous spot, and with a semihyaline band, which in the fore wings is undulating, and is intersected by the vitreous spot; it extends from much beyond half the length of the costa to a little before two-thirds of the interior border of the hind wings. Fore wings convex in front, attenuated towards the tips, falcate at the tips, undulating, and very oblique along the exterior border; vitreous spot more or less irregularly triangular. Hind wings very much broader than long, very much broader than the fore wings; vitreous spot more or less irregularly oval, larger than that of the fore wings. *Male.*—Fore wings more falcate than those of the female, and much more oblique along the exterior border. *Female.*—Antennæ slightly pectinated; branches alternately short and rudimentary.

8. Attacus Hesperus.

Mas et fœm. *Rufescens; thorax albo bifasciatus; alæ fascia semihyalina intus nigro extus rufo marginata, fascia lata exteriore subpurpurea nigro et albido conspersa, margine exteriore cervino fasciis tribus fuscis una maculari; alæ anticæ fascia alba indentata extus nigro fasciata, macula maxima fusca testaceo marginata striga alba maculisque roseis subapicalibus; posticæ basi roseæ, fascia basim versus obliqua undulosa alba extus nigro marginata.*

Phalæna Attacus Hesperus, *Linn. Syst. Nat.* 809, 1; *Mus. Lud. Ulr.* 367. *Cram. Pap. Exot.* i. 105, pl. 68, f. A. *Gmel. ed. Syst. Nat.* i. 5, 2401, 2.

———, *Merian, Ins. Serv.* pl. 65. *Seba, Mus.* iv. pl. 57, f. 4—6; pl. 58, f. 12, 13. *D'Aubent. Miscell.* pl. 66, f. 1. *Sulz. Hist. Ins.* pl. 21, f. 2.

Bombyx Hesperus, *Fabr. Syst. Ent.* 557, 2; *Sp. Ins.* ii. 167, 2; *Mant. Ins.* ii. 108, 2; *Ent. Syst.* iii. 1, 408, 2. *Oliv. Enc. Méth. Ins.* v. 24, 3.

Attacus Hesperus, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Speculares*) 156, 1628.

Male. Reddish. Thorax with a white band in front and another behind. Wings with the semihyaline band bordered with black on the inner side and with pale red on the outer side; beyond the latter there is a broad lilac black-and-whitish powdered band; exterior border fawn-colour, with three slender brown bands, of which the inmost is composed in the hind wings of oblong spots. Fore wings with the usual white band somewhat indented, forming a slightly acute angle, bordered with black on the outer side; the space within this band is more rosy than that without it; near each tip a very large brown spot, which has a testaceous border, and is accompanied on the outer side by a white streak, beyond which are some rosy spots. Hind wings with a white oblique undulating band near the base, bordered with black on the outer side; the space within it rosy red. *Female.*—Abdomen extending to more than half the breadth of the hind wings. Fore wings very slightly falcate, not attenuated towards the tips as in the male; colouring almost similar to that of the male.

Var. β. Female. Vitreous spot of the fore wings unusually small, not extending to the exterior band; fore angle truncated; fore side and interior side concave. Vitreous spot of the hind wings attenuated exteriorly, not interrupting the exterior band, which is unusually near to the exterior border.

Var. γ. Vitreous spot of the fore wings like that of *var β*, but not truncated in front. Vitreous spot of the hind wings much attenuated hindward, extending beyond the exterior band.

Var. δ. Vitreous spot of the hind wings not interrupting the exterior band.

In a small specimen of the male the antennæ are shorter than the thorax, and little more than half the usual length.

a. Santarem. From Mr. Bates' collection.
b. Brazil. From M. Becker's collection.
c. Brazil. From Mr. Milne's collection.
d. Brazil. From Mr. Stevens' collection.
e, *f.* Brazil. Presented by J. G. Children, Esq.
g, *h.* Rio Janeiro. From Mr. Stevens' collection.

Group 6.

Antennæ thorace vix breviores. Alæ amplæ, macula vitrea fasciaque undulosa semihyalina; anticæ apud costam subconvexæ, apice falcatæ, margine exteriore undulosa et perobliquo, macula vitrea mediocri subtrigona; posticæ valde latiores quam longæ, macula maxima vitrea longiovata, abdomen alas posticas dimidio superans. *Mas.*—Antennæ latissime pectinatæ.

Antennæ nearly as long as the thorax. Abdomen extending to about half the breadth of the hind wings. Wings ample; each with a vitreous spot, and with an undulating semihyaline band which joins the above spot; it extends from two-thirds of the length of the costa to two-thirds of the interior border of the hind wings. Fore wings slightly convex in front, falcate at the tips, undulating and very oblique along the exterior border; vitreous spot of moderate size, irregularly triangular, with the fore angle truncated. Hind wings very much broader than long, very much broader than the fore wings; vitreous spot very large, irregularly elongate-oval, about twice the size of that of the fore wings.

9. Attacus Jacobææ.

Mas. *Roseus; thorax albo bifasciatus; abdomen albo quadrivittatum, vittis lateralibus roseo maculatis; alæ ferrugineo-rufæ, basi roseæ, fascia semihyalina intus nigro extus roseo marginata, fascia exteriore subpurpurea albo conspersa necnon fascia adhuc exteriore cervina interlineata, margine exteriore testaceo; alæ anticæ apud costam cinereæ subpurpureo conspersæ, fascia lata alba extus nigro marginata, macula magna subapicali cervina ex parte subpurpurea striga alba maculisque tribus nigris contiguis; posticæ fascia basim versus arcuata alba extus nigro marginata, maculisque apud marginem exteriorem oblongis nigricantibus.*

Saturnia Jacobææ, *MSS.*

Male. Body rose-colour. Thorax with a white band in front and another behind. Abdomen with four white stripes; the lateral pair with rows of rosy spots. Wings ferruginous-red, rosy towards the base, gray and powdered with lilac along the costa of the fore wings; semihyaline band bordered with black on the inner side and with rose-colour on the outer side; beyond the latter there is a purplish white-powdered band, along whose outer side there is a fawn-coloured band; exterior border testaceous, intersected by a slender

darker undulating band. Fore wings with the white band broad, forming a slightly acute angle, bordered with black on the outer side; near each tip a large fawn-coloured spot, which is lilac outwardly, and is there bounded by a white streak; the latter is accompanied by three blackish spots. Hind wings with a curved white band near the base, bordered with black on its outer and concave side; a row of oblong blackish spots along the exterior border. Length of the body 14—15 lines; of the wings 58—60 lines.

a. Brazil. From M. Becker's collection.

Group 7.

Antennæ thorace paullo longiores. Alæ amplæ, macula maxima trigona fasciaque vitreis; anticæ apud costam convexæ, apice falcatæ, margine exteriore unduloso; posticæ valde latiores quam longæ, maculis vitreis majoribus, abdomen plus dimidio superantes. *Mas.*—Antennæ latissime pectinatæ, ramis dense ciliatis. Alæ anticæ apud marginem exteriorem perobliquæ.

Antennæ rather longer than the thorax. Abdomen extending to much more than one-third of the breadth of the hind wings. Wings ample; each with a very large triangular vitreous spot, and with a vitreous band, which extends from beyond two-thirds of the length of the costa to about two-thirds of the interior border of the hind wings. Fore wings convex in front, falcate at the tips, undulating along the exterior border; vitreous spot with an obtuse angle in front. Hind wings very much broader than the fore wings, much broader than long; vitreous spots with somewhat rounded sides and angles, much larger than that of the fore wings. *Male.*—Fore wings very oblique along the exterior border.

10. Attacus Aricia.

Mas. *Cervinus; thorax antice albo fasciatus; abdomen testaceum; alæ fascia vitrea intus nigro extus rufo marginata, fascia exteriore lata lutea nigro et subpurpureo conspersa, margine exteriore testaceo; anticæ apud costam cinereæ, fascia basim versus albida extus ex parte nigro marginata, maculis tribus subapicalibus, 1a magna subpurpurea, 2a rosea, 3a nigra, strigaque testacea, maculis apud marginem exteriorem testaceis extus fulvo marginatis; posticæ fascia basim versus alba extus nigro marginata, maculis apud marginem exteriorem oblongis nigris, fasciaque exteriore angusta fusca.*

Saturnia Aricia, *MSS.*

Male. Fawn-colour. Thorax with a white band in front. Abdomen testaceous. Wings with the vitreous band bordered with black on the inner side and with pale red on the outer side; beyond the latter there is a broad luteous black and lilac-powdered band; exterior border testaceous. Fore wings gray along the costa, behind which towards the base the whitish band forms a slightly acute angle, whose fore side is bordered outwards with black; near each tip a large lilac spot, which is accompanied on the outer side by a rosy-red spot in front, and by a black spot behind; beyond these two spots there is a pale testaceous streak, and along the rest of the exterior border are four pairs of pale testaceous spots whose outer borders are tawny. Hind wings with the white band towards the base bordered with black on the outward side; a row of oblong black spots along the exterior border; these spots successively decrease in size hindward, and are bounded on the outer side by a slender brown band. Length of the body 11—12 lines; of the wings 54—60 lines.

a. Santa Fé de Bogotà. From Mr. Isaacson's collection.

Group 8.

Antennæ thorace breviores. Alæ amplæ, macula magna vitrea fasciaque semihyalina; anticæ valde falcatæ, apud costam convexæ, margine exteriore perobliquo valde unduloso, macula vitrea subtrigona; posticæ valde latiores quam longæ, macula vitrea ovata majore.

Antennæ shorter than the thorax. Abdomen extending to more than half the breadth of the hind wings. Wings ample; each with a large vitreous spot, and with a semihyaline band which extends from two-thirds of the length of the costa to two-thirds of the interior border of the hind wings; exterior border testaceous, with a slender tawny band. Fore wings convex in front, much hooked at the tips, deeply undulating and very oblique along the exterior border; vitreous spot irregularly triangular; its fore sides and its fore angle rounded. Hind wings very much broader than long, very much broader than the fore wings; vitreous spot oval, larger than that of the fore wings.

11. Attacus Ethra.

Mas. *Cervinus; thorax albo bifasciatus; abdomen vittis duabus lateralibus duplicatis albis; alæ fascia semihyalina intus nigro extus rufo marginata, fascia exteriore incompleta subpurpurea nigro et albo conspersa, margine exteriore testaceo fascia angusta fulva; anticæ apud costam cinereæ albo conspersæ, fascia basim versus alba extus nigro marginata, maculis quatuor subapicalibus, 1a magna subpurpurea extus albo marginata, 2a nigra, 3a 4aque cinereis; posticæ fascia basim versus alba extus nigro marginata, maculis apud marginem oblongis fuscis.*

Phalæna-Bombyx Attacus Aurota, *Cram. Pap. Exot.* i. 11, pl. 8, f. A.

——— ———, *Merian, Ins. Serv.* pl. 52. *Seba, Mus.* iv. pl. 57, f. 56.

Phalæna-Bombyx Attacus Atlas, *Var. β. Gmel. ed. Syst. Nat.* i. 5, 2401, 1.

Bombyx Ethra, *Oliv. Enc. Méth. Ins.* v. 24, 2, pl. 69, f. 2.

Cayenne. Surinam.

Male. Fawn-colour. Thorax with a white band in front and another behind. Abdomen with a double white stripe along each side. Wings with the semihyaline band bordered with black on the inner side and with pale red on the outer side; beyond the latter there is an incomplete lilac band powdered with black and white. Fore wings gray and powdered with white along the costa, behind which towards the base the white band forms a hardly acute angle, and is bordered with black on the outside; a large lilac subapical spot is bounded on the outer side by a slender zigzag white streak, beyond which there is one black spot between two gray spots. Hind wings with the white band towards the base bounded with black on the outward side; a row of oblong brown spots along the exterior border. Length of the body 12—14 lines; of the wings 44—48 lines.

Female. Ferruginous, otherwise much like the male. Fore wings much less falcate; vitreous spots larger, but less interrupting the exterior band. Abdomen with a white dorsal stripe, which extends from the middle to the tip. Length of the body 15 lines; of the wings 58 lines.

a. Santa Fé de Bogotà. From Mr. Isaacson's collection.
b. Carraccas. Presented by E. Doubleday, Esq.

Group?

12. Attacus Zacatica.

Alæ valde angustæ subfalcatæ nigræ, omnes macula maxima vitrea, anticæ striga basali geniculata alba, ad apicem fulvo castaneo cinereoque variegatæ, fascia interrupta albâ extus rufescente; posticæ nigræ, prope marginem posticum fascia interrupta alba extus castaneo rufa, margine postico cinereo variegato.

Saturnia Zacatica, *Westw. Ann. Nat. Hist. 2nd Ser.* xv. 295.

Distinguished by its very narrow wings and by the large size of the vitreous spots.

Bogotà.

Africa.

A. Abdomen breve.

A. Maculæ vitreæ arcuatæ. *Maris* alæ anticæ valde falcatæ. Vacuna, *Westw.*

B. Maculæ vitreæ ellipticæ. - - - Baumhiria, *MSS.*

B. Abdomen mediocriter longum. Maculæ vitreæ in alis anticis fusiformes, in posticis ellipticæ. *Maris* alæ anticæ subfalcatæ. Mythimna, *Westw.*

Group 1.

Antennæ thorace longiores. Alæ amplæ, macula magna vitrea; anticæ subfalcatæ, apud costam convexæ, margine exteriore obliquo subunduloso, macula vitrea elongata subfusiformi subarcuata aut falciformi; posticæ multo latiores quam longæ, macula vitrea elliptica majore aut plus minusve falciformi. *Mas.*—Antennæ latissime pectinatæ, ramis æqualibus ciliatis duplicatis. Alæ posticæ, abdomen bistriente aut plus superantes. *Fœm.*—Antennæ late pectinatæ. Alæ posticæ abdomen triente aut plus dimidio superantes.

The three African species differ much from the other groups of *Attacus*, and are the least typical of the genus. Antennæ rather longer than the thorax. Wings ample; each with a large vitreous spot. Fore wings convex in front, more or less falcate at the tips, oblique and undulating along the exterior border; vitreous spot elongate, subfusiform, and slightly curved or falciform. Hind wings much broader than long, much broader than the fore wings; vitreous spot elliptical and larger than that of the fore wings, or

somewhat falciform. *Male.*—Antennæ extremely deeply pectinated; branches of equal length, slender, ciliated, in pairs. Abdomen not extending beyond one-fourth or one-third of the breadth of the hind wings. Fore wings more falcate than those of the female and more oblique along the exterior border. Hind wings broader. *Female.*—Antennæ deeply pectinated. Abdomen much less or much more than half the breadth of the hind wings.

13. Attacus Vacuna.

Alæ antice maris *falcatæ, fascia communi media alba; omnes lunula magna media vitrea, utrinque albo flavoque marginata; anticæ macula ovali nigra subapicali (albo supra ciscumdata.)*

Saturnia Vacuna, *Westw. Proc. Zool. Soc. Lond.* 1849, 39, 1, pl. 7, f. 1, mas.

"*Male.* Fore wings considerably falcate at the tips; hind wings almost triangular. *Female.*—Fore wings somewhat emarginate in the middle of the hind margin; hind wings less elongated. *Male.*—Antennæ broad, with forty-six rays on each side lying flat; the four rays of each joint of equal length. *Female.*—Antennæ of considerable breadth, with forty-eight or fifty rays on each side. Palpi very short, but distinct and rather slender. Spiral tongue distinct, composed of two flattened fur filaments."—*Westw.*

Very much like *A. Cynthia* and *A. lunula* in structure.

a. Ashanti. From the Wesleyan Missionary Society's collection.

14. Attacus Mythimna, *Westw.*

Rufo-fuscus; antennæ fulvæ; thoraæ posticus albo fasciatus; abdomen fasciis apiceque albis; alæ albo conspersæ, fascia undulosa alba intus fusco marginata, margine exteriore testaceo; anticæ vitta brevi alba basali, apud apices cervinæ striga angulosa alba maculaque atra; posticæ fascia basim versus alba maculisque exterioribus fuscis.

Saturnia Mythimnia, *Westw. Proc. Zool. Soc. Lond.* 1149, 40, 2, pl. 8, f. 3.

"Fore wings considerably emarginate along the outer margin in the male, more slightly so in the female. Palpi porrected, not extending beyond the hairs of the clypeus. Antennæ broadly pennate, with the rays continued to the tip. *Male.*—Antennæ with

fifty-eight rays (arranged in double pairs to each joint), with single rays at the tip. *Female.*—Antennæ with fifty-eight long rays (four to each joint), with eight or ten single rays at the tip."—*Westw.*

Reddish brown. Antennæ tawny. Thorax with a broad white band on the hind border. Abdomen with white bands; tip white. Wings thickly powdered with white, adorned with an undulating white band, which extends from two-thirds of the length of the costa to two-thirds of the breadth of the hind wings; it is bordered with dark brown on its inner side, which touches the border of the vitreous spot in the male, but is apart from it in the female; exterior border testaceous. Fore wings with a short white stripe, which proceeds from the hind part of the base to the vitreous spot; tips fawn-colour, with a zigzag white streak and a deep black spot. Hind wings with a white band, which is near the base, and thence forms a curve along the costa and joins the exterior band; a row of brown spots along the exterior border. Length of the body 10—15 lines; of the wings 46—50 lines.

a, *b*. Port Natal. From M. Gueinzius' collection.
c, *d*. Zoolu Country. Presented by G. F. Angas, Esq.

15. Attacus Baumhiria.

Mas. *Coccineo-rufus; caput supra luteum; antennæ testaceæ; abdomen albo fasciatum; alæ albo conspersæ, basi fasciaque undulosa albis; anticæ subfalcatæ, apice fulvæ, striga testacea apicali maculaque nigra rotunda subapicali intus albo marginata, margine exteriore testaceo fusco angulatim vittato; posticæ apud marginem exteriorem luteæ et cervinæ, fascia angusta lunulisque rufo-fuscis.*

Saturnia Baumhiria, *MSS.*

Crimson-red. Head luteous above. Antennæ testaceous. Abdomen with white bands, wholly white towards the tip. Wings thickly powdered with white, wholly white towards the base, excepting in front of the fore wings, adorned with an undulating white band, which extends from two-thirds of the length of the fore wings to three-fourths of the breadth of the hind wings, and touches the outer border of the vitreous spot. Fore wings slightly falcate, tawny towards the tips, with a testaceous apical mark, and a black subapical round spot, which is bordered with white on the inner side; exterior border testaceous, with a very slender zigzag brown stripe. Hind wings luteous and fawn-colour along the exterior

border, with a slender reddish brown band, which is accompanied on the inner side by reddish brown lunules. Length of the body 8 lines; of the wings 42 lines.

a. Senegal. From M. Becker's collection.

Asia.

A. Alæ macula vitrea trigona. - - - - Atlas, *Linn.*
B. Alæ macula vitrea lunata.
A. Alæ lunula elongata. - - - - Cynthia, *Drury.*
B. Alæ lunula brevi. - - - - - lunula, *MSS.*

Group 1.

Antennæ thorace paullo longiores. Alæ macula magna trigona vitrea variabili; anticæ valde falcatæ, apud costam valde convexæ, margine exteriore valde concavo; posticæ fere duplo latiores quam longæ, abdomen plus bis triente superantes. *Mas.*—Alæ anticæ plus falcatæ. *Fœm.*—Alæ anticæ minus falcatæ.

Antennæ a little longer than the thorax. Abdomen extending to much less than one-third of the breadth of the hind wings. Wings with a large discal distinctly triangular vitreous spot, which is very variable in shape. Fore wings very convex in front, much or very much hooked at the tips, deeply concave on the exterior border. Hind wings nearly twice broader than long, very much broader than the fore wings; vitreous spot with the angle towards the interior border truncated. *Male.*—Wings more falcate than those of the female.

16. Attacus Atlas.

Alæ falcatæ luteo variæ, macula fenestrata, anticis sesquialtera.

Phalæna-Bombyx Attacus Atlas, *Linn. Syst. Nat.* 808, 1; *Mus. Lud. Ulr.* 366. *Cram. Pap. Exot.* iv. 180, 183, pl. 381, f. C.; pl. 382, f. A. *Gmel. ed. Syst. Nat.* i. 5, 2400, 1.

——— ———, *Petiv. Gazoph.* pl. 8, f. 7. *Act. Acad. Nat. Cur. Dec.* 2, *ann.* 2. *Valent. Mus.* ii. 168, pl. 64. *Merian, Ins. Sur.* pl. 52. *Knorr, Delict. Nat. Select.* pl. C. 4, 1. *Seba, Mus.* iv. pl. 57, f. 2, 3; pl. 58, f. 6, 10.

Bombyx Atlas, *Fabr. Syst. Ent.* 556, 1; *Sp. Ins.* ii. 167, 1; *Mant. Ins.* ii. 108, 1; *Ent. Syst.* iii. 1, 407, 1. *Oliv. Enc. Méth. Ins.* v. 24, 1, pl. 69, f. 1.

Attacus Atlas, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Speculares*), 156, 1625.
Saturnia Silhetica, *Helfer, Journ. Asiat. Soc. Bengal*, vi. 41, 4.
Var. Phalæna Attacus Atlas, *Cram. Pap. Exot.* i. 13, pl. 9, f. A.
Attacus Talas, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Speculares*), 156, 1626.

I. Vitreous spot of the fore wing accompanied by a small fusiform or more elongate vitreous spot, which is rather nearer to the tip of the wing.

Var. α. Male. Vitreous spot of the fore wings with a right angle towards the costa, the interior angle much more attenuated than the exterior angle; sides nearly straight. Small vitreous spot fusiform.

Var. β. Male. Vitreous spot with a very obtuse angle towards the costa; exterior angle of the spot more attenuated than in *var. α*; exterior side more oblique; interior side angular. Small vitreous spot elongate fusiform.

Var. γ. Female. Spot broader; exterior angle very acute; fore angle and interior angle much rounded; interior side convex.

Var. δ. Size extremely large. Like *var. γ*; spots with the exterior angle more elongated; spot of the hind wings with the interior angle not truncated.

II. No small vitreous spot.

Var. ε. Male. Interior angle of the spot much attenuated, somewhat rounded; fore angle very obtuse and rounded.

Var. ζ. Female. Spot much like that of *var. γ*.

Var. η. Vitreous spots comparatively small, spot of the fore wings narrow, regularly or irregularly angular in front; that of the hind wings regularly triangular.

Var. θ. Like *var. η*, but with rather larger spots; that of the fore wings broader, with a right angle in front; that of the hind wings with the interior angle much truncated.

a—c. North India. From Mr. James' collection.
d. Silhet. From the Rev. J. Stainforth's collection.
e, f. East Indies. From Archdeacon Clerk's collection.
g. North India. From Mr. Stevens' collection.

h. ———? From Mr. Children's collection.
i, j. Silhet. From Mr. Sowerby's collection.
k. Ceylon. From the Rev. J. Wenham's collection.

Group 2.

Corpus gracilius. Antennæ thorace non breviores. Alæ amplæ, macula angusta lunata vitrea fasciaque semihyalina; anticæ falcatæ, apud costam convexæ, margine exteriore obliquo unduloso; posticæ valde latiores quam longæ, macula vitrea præsertim arcuata. *Mas.*—Antennæ latissime pectinatæ, ramis ciliatis duplicatis æqualiter longis.

Body more slender than in any of the other groups of *Attacus*. Antennæ as long as the thorax. Abdomen not extending to one-fourth of the breadth of the hind wings. Wings ample; each with a narrow lunate vitreous spot, and a semihyaline band which extends from much beyond the middle of the costa of the fore wings to very near the end of the interior border of the hind wings. Fore wings convex along the costa, falcate at the tips, oblique and undulating along the exterior border. Hind wings very much broader than long, very much broader than the fore wings; vitreous spot much more curved than that of the fore wings. *Male.*—Antennæ extremely deeply pectinated; branches of equal length, slender, ciliated, in pairs.

This group in the shape of its wings is almost similar to the other Asiatic form, which may be considered as the type of the genus, but the American groups have more resemblance to the latter in the colouring of the wings and in the form of the vitreous spot.

17. Attacus Cynthia.

Alæ fasciatæ luteo-fuscæ, fascia communi albida striga basali lunulaque discali; anticæ ocello parvo apicali.

——— ———, *D'Aubent. Ill.* pl. 42, f. 1.
Phalæna Attacus Cynthia, *Drury, App.* ii. *Cram. Pap. Exot.* i. 62, pl. 39, f. A. *Roxb. Linn. Trans.* vii. 42. *Buchanan, Decer. Dinajpur*, 214.
Bombyx Cynthia, *Oliv. Enc. Méth.* v. 30, 26.
Saturnia Cynthia, *Westw. ed. Drury*, ii. 12, pl. 6, f. 2. *Helfer, Journ. Asiat. Soc. Bengal*, vi. 45, 9.
Samia Cynthia, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Speculares*), 156, 1629.

a. Nepaul. Presented by Major-Gen. Hardwicke.
b, *c*. Silhet. From the Rev. J. Stainforth's collection.
d. North India. From Mr. Stevens' collection.
e. Java. From the East India Company's collection.
f. Van Dieman's Land. Presented by Dr. Sinclair.

Var. β. Wings fawn-colour, with the usual marks.

g. North China. From Mr. Fortune's collection.

18. Attacus lunula.

Mas. *Cervinus; thorax albido bifasciatus; alæ fascia albida intus fusco marginata, extus subobsolete duplicata, macula vitrea antice nigro postice flavo marginata; anticæ fascia basim versus albida fusco marginata, macula magna subapicali pallide purpurea, striga angulosa alba macula exteriore lutea ocelloque nigro ex parte albo marginato; posticæ fascia albida obliqua fusco marginata.*

Saturnia lunula, *MSS.*

Male. Fawn-colour. Thorax with a whitish band in front and another behind. Wings with the whitish band edged with brown on the inner side, indistinctly double on the outer side; vitreous spot bordered with black in front and with yellow behind. Fore wings with a whitish basal stripe, which is bordered with brown, and is continuous with the hind band of the thorax; it extends to the stripe and then forms a little semicircle, and is thence retracted obliquely to the costa; a large lilac subapical spot, with a zigzag white streak, an outer luteous spot, and a black ocellus partly bordered with white. Hind wings with a whitish oblique brown-bordered band, which is near the base and is curved towards the costa, and there united to the other band. *Female.*—Like the male; fore wings much less falcate; hind wings much broader posteriorly. Length of the body 7—8 lines; of the wings 48—50 lines.

Silhet. Assam. China.

a, *b*. North India. From Mr. James' collection.
c. Silhet. Presented by E. Doubleday, Esq.
d. Ceylon. From the Rev. J. Wenham's collection.

Species dubiæ.

19. Attacus? Irius.

Alæ patulæ helvolæ; anticæ macula fenestrata, posticæ ocello atro; pupilla fenestrata.

Bombyx Irius, *Fabr. Ent. Syst.* iii. 1, 409, 5.

Magnitudo fere *A. Atlas*. Alæ supra helvolæ; anticæ macula media, fenestrata, triangulari; posticæ ocello magno, atro, pupilla triangulari fenestrata absque iride, subtus fusco.

East Indies.

20. Attacus? Saturnus.

Alæ patentes, cinereæ, macula triangulari fenestrata; posticæ ocello atro, pupilla nictitante.

Bombyx Saturnus, *Fabr. Ent. Syst.* iii. 1, 409, 6.

Magnitudo et statura præcedentis. Alæ anticæ cinereæ striga una alterave obscuriore et in medio macula parva triangulari fenestrata; posticæ cinereæ, ocello in medio magno atro, iride fulva albaque, pupilla minuta oblonga fenestrata, subtus basi cinereæ macula orbiculata fusca tunc fascia et in medio lunula loci ocelli.

East Indies.

Genus 2. SAMIA.

Mas. Corpus vix robustum. Antennæ latissime pectinatæ; rami æqualiter longi, graciles, ciliati, duplicati. Alæ anticæ falcatæ, margine exteriore unduloso perobliquo; posticæ valde latiores, abdomen bis triente superantes. *Fœm.*—Corpus robustum. Antennæ late pectinatæ. Alæ anticæ vix falcatæ, margine exteriore obliquo vix unduloso; posticæ abdomen dimidio superantes.

Samia, *Hübn. Verz. Schmett.* 156.
Phalæna Attacus, p., *Linn., &c.*
Bombyx, p., *Fabr.*
Hyalophora, p., *Duncan, Nat. Libr.* vii.
Saturnia, p., *Westw.*

Male. Body hardly stout. Antennæ very deeply pectinated; branches of equal length, slender, ciliated, in pairs. Abdomen extending to about one-third of the breadth of the hind wings. Fore

wings falcate at the tips, undulating and very oblique along the exterior border; interior angle rounded; discal areolet open; three inferior veins; first and second contiguous; third very remote. Hind wings very much broader than the fore wings. *Female.*—Body stout. Antennæ deeply pectinated, otherwise like those of the male. Abdomen extending to half the breadth of the hind wings. Fore wings hardly falcate; exterior border much less oblique and undulating than that of the male. Hind wings not so broad.

In this genus the colouring of the wings much resembles in design that of *Attacus*, but the hind wings of the female are not dilated, and there is no trace of a vitreous spot.

A. Alæ *maris* nigricantes.
  A. Alæ anticæ macula discali.
    a. Alæ anticæ macula discali rufa. - - Cecropia, *Linn.*
    b. Alæ anticæ macula discali alba. - - Calleta, *Westw.*
  B. Alæ anticæ macula nulla discali. - - Promethea, *Drury.*
B. Alæ anticæ fuscæ. - - - - angulifera, *Walk.*

1. Samia Promethea.

Alæ subfalcatæ margine cinereæ, maris *nigræ*, fœm. *ferruginea; anticæ utrinque ocello atro.*

Phalæna-Bombyx Attacus Promethea, *Drury*, *Ill. Ins.* ii. pl. 11, f. 1, 2, mas.; pl. 12, f. 1, 2, fœm. *App.* ii. *Cram. Pap. Exot.* i. 118, pl. 75, f. A, B, fœm.; pl. 76, f. A, B, mas. *Gmel. ed. Syst. Nat.* i. 5, 2403, 464. *Pal. Beauv. Ins. Afr. et Amer. Lep.* pl. 21. *Abbot and Smith, Lep. Ins. Georg.* i. pl. 46.

Bombyx Promethea, *Fabr. Syst. Ent.* 558, 7; *Sp. Ins.* ii. 168, 8; *Mant. Ins.* ii. 108, 9; *Ent. Syst.* iii. 1, 411, 12. *Oliv. Enc. Méth.* v. 27, 12.

Saturnia Promethea, *Westw. Ed. Drury*, ii. 20, pl. 11, fl, 2; pl. 12, f. 1, 2.

Samia Promethea, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Speculares*) 156, 1631.

a—c. North America. Presented by H. Doubleday, Esq.
d—h. North America. Presented by E. Doubleday, Esq.
i. ———?

2. Samia angulifera.

Mas et fœm. *Alæ fascia angulosa nigricante intus diffusa extus albido marginata, macula discali albida furcata nigro marginata, margine exteriore testaceo linea undulosa; anticæ vix falcatæ, fascia testacea arcuata extus nigro marginata, ocello nigro subapicali intus albo marginato; posticæ maculis elongatis submarginalibus.* Mas.—*Fusca.* Fœm.—*Ferruginea aut rufescens.*

Male and female. Wings with a blackish zigzag band, which extends from much beyond the middle of the costa of the fore wings to three-fourths of the breadth of the interior border of the hind wings; this band is diffuse on the inner side, and is bordered with a diffuse whitish hue on the outer side; discal spot whitish, forked, with a black border, larger in the fore wings than in the hind wings; exterior border pale testaceous, with an undulating line. Fore wings hardly falcate, with a dull testaceous, curved, outwardly black-bordered band between the base and the discal spot, and with a black subapical ocellus, which is bordered with white on the inner side. Hind wings with a row of elongated spots near the exterior border. *Male.*—Brown. Antennæ very deeply pectinated; branches in pairs, which are of equal length. Abdomen extending to much less than half the breadth of the hind wings. *Female.*—Ferruginous or reddish. Antennæ moderately pectinated; the alternate branches black and rather longer than the others. Abdomen extending to much more than half the breadth of the hind wings. Length of the body 7—12 lines; of the wings 42—48 lines.

a, *b*. North America. Presented by H. Doubleday, Esq.

3. Samia Cecropia.

Alæ anticæ subfalcatæ, posticæ rotundatæ; quatuor subcinereæ fascia communi fulva maculaque reniformi ocelloque apicali (in anticis) ornatæ.

Samia Cecropia, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Speculares*) 156, 1630.

Phalæna-Bombyx Attacus Cecropia, *Linn. Syst. Nat.* 2, 809, 3; *Mus. Lud. Ulr.* 368. *Gmel. ed. Syst. Nat.* i. 5, 2401, 3. *Cram. Pap. Exot.* iv. 66, pl. 42, f. A, B. *Abbot and Smith, Nat. Hist. Lep. Ins. Georg.* pl. 45.

Bombyx Cecropia, *Fabr. Syst. Ent.* 557, 3; *Sp. Ins.* ii. 167, 3; *Mant. Ins.* ii. 108, 4; *Ent. Syst.* iii. 1, 408, 4. *Oliv. Enc. Méth. Ins.* v. 25, 5, pl. 69, f. 3.

——— ———, *Catesby, Carol.* ii. 86, pl. 86. *Seba, Mus.* iv. pl. 58, f. 4, 5? *Clerck, Icon. Ins.* pl. 49, f. 1. *Drury, Illustr.* i. pl. 18, f. 2.

Saturnia Cecropia, *Westw. ed. Drury*, i. 32, pl. 18, f. 2.

a—c. North America. Presented by E. Doubleday, Esq.
d, e. North America.

4. SAMIA CALLETA.

Alæ nigricante fuscæ, omnes in medio macula angulata strigaque communi integra inter medium et apicem albis notatæ; anticæ striga angusta angulata versus basim, occllo nigro extus ferrugineo serieque lunularum nigrarum subapicalibus; posticæ serie subapicali macularum nigrarum lineaque tenui undata nigra.

Saturnia Calleta, *Westw. Ann. Nat. Hist. 2nd Ser.* xv. 297.

a. Mexico. From Mr. Glennie's collection.
b. Mexico. From M. Hartweg's collection.

Genus 3. TELEA.

Antennæ thorace longiores. Alæ amplæ, macula vitrea; anticæ apud costæ apicem convexæ, apice rotundatæ, margine exteriore obliquo; posticæ multo latiores, abdomen superantes. *Mas.*—Antennæ latissime pectinatæ, corporis dimidio longiores; rami graciles, ciliati, duplicati. Abdomen robustum. Alæ anticæ falcatæ, margine exteriore concavo, macula vitrea elliptica minore; posticæ subtruncatatæ, abdomen dimidio superans. *Fœm.*—Antennæ mediocriter pectinatæ; rami simplices. Abdomen crassum. Alæ anticæ non falcatæ, margine exteriore vix concavo, macula vitrea rotunda majore; posticæ abdomen paullo superantes.

Phalæna-Bombyx Attacus, p., *Cram.; Gmel.*
Bombyx, p., *Fabr.; Oliv.*
Telea, *Hübn. Verz. Schmett.* 154.

Antennæ longer than the thorax. Abdomen not extending so far as the hind wings. Wings ample; each with a vitreous spot, which is intersected by a ridge. Fore wings convex towards the tip of the costa, rounded at the tips, oblique along the exterior border. Hind wings much broader than the fore wings. *Male.*—Antennæ excessively deeply pectinated, more than half the length of the body; branches slender, ciliated, in pairs. Abdomen stout, extending to half the breadth of the hind wings. Fore wings falcate at the tips, concave along the exterior border; vitreous spot elliptical, much smaller than that of the female. Hind wings

slightly truncated towards the tip of the costa and along the exterior border, which is very obtusely angular in the middle; vitreous spot a little smaller than that of the fore wings of the male and that of the hind wings of the female. *Female.*—Antennæ moderately pectinated; branches single, of moderate length. Abdomen very thick, extending to three-fourths of the breadth of the hind wings. Fore wings not falcate, hardly concave along the exterior border; vitreous spot round, larger than that of the hind wings. Hind wings more rounded than those of the male; vitreous spot subelliptical, smaller than that of the fore wings, forming the pupil of a large ocellus.

This genus is nearly allied to *Samia*, but may be distinguished by the form of its wings, and by the distinct vitreous spots.

1. Telea Polyphemus.

Alæ falcatæ cinereo carneæ, fascia atra ocelloque fenestrato, posticorum majore.

Telea Polypheme, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Recondentes*) 154, 1610. *Hübn. Samml. Exot. Schmett.* ii. *Lep.* iii. *Phal.* i. *Sphing.* v. *Echidnæ*, D. *Recondentes*, 3, f. 1—4.

Phalæna-Bombyx Attacus Polyphemus, *Cram. Pap. Exot.* i. 8, pl. 5, f. A, B. *Gmel. ed. Syst. Nat.* 5, 2402, 4.

Bombyx Polyphemus, *Fabr. Spec. Ins.* ii. 168, 5; *Mant. Ins.* ii. 108, 6; *Ent. Syst.* iii. 1, 410, 8. *Oliv. Enc. Méth.* v. 25, 7, pl. 69, f. 4.

a—d. North America. Presented by E. Doubleday, Esq.
e, f. North America. From Mr. Milne's collection.
g, h. Brazil. From Mr. Stevens' collection.
i. ——— ?

Genus 4. BUNÆA.

Corpus robustum. Antennæ thoracis longitudine. Thorax utrinque fasciculatus. Alæ longiusculæ, sat latæ; anticæ apud costæ apicem subconvexæ, apice angulatæ, margine exteriore obliquo subrecto; posticæ latiores, abdomen superantes. *Mas.*—Antennæ latissime pectinatæ, apice serratæ; rami ciliati, duplicati, æqualiter longi. *Fœm.*—Antennæ subpectinatæ, ramis alternis.

Bunæa et Imbrasia, *Hübn. Verz. Schmett.* 154.
Phalæna-Bombyx Attacus, p., *Cram.*; *Stoll.*; *Gmel.*
Bombyx, p., *Fabr.*; *Oliv.*
Lomelia, *Duncan, Nat. Libr.* vii.
Saturnia, p., *Westw.*; *Boisd.*

Body stout. Antennæ as long as the thorax. Thorax with a lappet on each side. Abdomen not extending so far as the hind wings. Wings rather long, moderately broad. Fore wings slightly convex on the apical part of the costa, more or less acutely angular at the tips, oblique and almost straight or hardly concave along the exterior border. Hind wings rather broader than the fore wings. *Male.*—Antennæ very deeply pectinated, except near the tips, where they are serrated with alternate short and very short teeth; branches of equal length, slender, ciliated, in pairs. *Female.*—Antennæ very slightly pectinated, with alternate very short and rudimentary branches.

This genus differs from *Antheræa* in its more elongated fore wings, and more especially in the vitreous spot of the latter. These have no trace of the ocellus which, like that on the hind wings, appears on the fore wings of all the *Antherææ*, though in several species of the latter genus it is much smaller than the hind wing-ocellus. It seems to connect the *Drepanulidæ* with the *Saturniidæ* by means of the genus *Cricula*.

A. Alæ posticæ non aut vix angulatæ.
  A. Alæ posticæ ocello pallido.
    A. Alæ anticæ macula magna vitrea. - Alcinoe, *Cram.*
    B. Alæ anticæ macula mediocri vitrea. - - Alinda, *Drury.*
    C. Alæ anticæ macula nulla vitrea.
      a. Alæ anticæ unifasciatæ. - - - nictitans, *Fabr.*
      b. Alæ anticæ bifasciatæ. - - - - Alopia, *Westw.*
  B. Alæ posticæ ocello nigro.
    A. Alæ posticæ ocello maximo.
      a. Alæ fuscæ. - - - - - Phædusa, *Drury.*
      b. Alæ fulvæ.
        i. Alæ anticæ macula vitrea non marginata. Angasana, *Westw.*
        ii. Alæ anticæ macula vitrea marginata. Acetes, *Westw.*
    B. Alæ posticæ ocello mediocri. - - Tyrrhena, *Westw.*
B. Alæ posticæ valde angulatæ.
  A. Alæ posticæ angulo non producto. - - Forda, *Westw.*
  B. Alæ posticæ angulo producto.
    A. Alæ anticæ non trifasciatæ.
      a. Alæ posticæ ocello fasciaque exteriore contiguis. Mopsa, *Walk.*
      b. Alæ posticæ ocello fasciaque exteriore non contiguis.
        i. Alæ posticæ angulo lato nigro. . Epimethea, *Drury.*
        ii. Alæ posticæ angulo angusto nigro. - Dorcas, *Walk.*
    B. Alæ anticæ trifasciatæ. - - - Ethra, *Westw.*

1. Bunæa Alcinoe.

Alæ anticæ falcatæ rufo badiæ costa lata alba, striga communi recta transversa prope basin, fascia lata alba pone medium in qua striga recta fusca; anticæ macula mediana vitrea subquadrata, posticæ ocello ovali pupilla vitrea, iride lata fulva, annulo nigro circumdata, macula vitrata in alis anticis magna subquadrata, in posticis minima subrotunda. Alæ anticæ plus falcatæ, apud costam magis convexæ, margine exteriore vix concavo; posticæ abdomen paullo superantes. Fœm. —*Alæ anticæ margine exteriore recto; posticæ abdomen perpaullo superantes.*

Phalæna-Bombyx Attacus Alcinoe, *Cram. Pap. Exot.* iv. 67, pl. 322, f. A, B.

Phalæna-Bombyx Attacus Caffraria, *Stoll, Pap. Exot. Suppl.* pl. 31, f. 2.

Bombyx Alcinoe, *Oliv. Enc. Méth.* v. 31, 29.

Saturnia Alcinoe, *Boisd. Faune Ent. Mad. Bomb. et Maur. Lép.* 88, 1. *Westw. Proc. Zool. Soc. Lond.* 1849, 50, 14.

Saturnia Caffra, *Boisd. Delagorgue, Voy. dans l'Afriq. Austr.* 71, 601.

Bunæa Caffra, *Hübn. Verz. Schmett.* (*Phalanæ Sphingoides Echidnæ Recondentes*) 154, 1608.

——— ———, *Angas' Plate Zoolu Moths*, f. 15.

"Palpi distinct, slender, not extending beyond the hairs of the clypeus. *Male.*—Antennæ with fifty-four rays on each side, the two basal rays of each joint converging inwardly, and being bent more obliquely, so that the tips of the rays form four distinct rows; all the rays are moreover set on more obliquely than in the typical species. *Fem.*—Antennæ moderately pectinated, the two apical rays of each joint almost obliterated."—*Westw.*

Vitreous spot of the fore wings large, subquadrate; hind side shorter than the fore side; outer and inner sides concave, especially the former. Vitreous spot of the hind wings nearly round, hardly one-fourth of the size of that of the fore wings. *Male.*—Abdomen extending to three-fourths of the breadth of the hind wings. Fore wings a little more convex on the costa, more falcate and more acutely angular at the tips than in the female; exterior border very slightly concave. *Female.*—Abdomen extending to beyond three-fourths of the breadth of the hind wings. Fore wings straight along the exterior border.

a. South Africa. Presented by Dr. A. Smith.
b. South Africa. From Mr. Milne's collection.
c, *d*. Port Natal. From M. Gueinzius' collection.
e. ——— ?

2. Bunæa Tyrrhena.

Alæ anticæ falcatæ subcinereo-fuscæ basi rubidæ, striga undulata prope basin alteraque lunulata subapicali fuscis, macula parva mediana subtrigona vitrea, limbo apicali rufo; posticæ rufæ ocello magno ovali nigro pupilla parva vitrea, striga undata obscuriore, limbo lato pallide subcinereo-fusco.

Fœm. Alæ anticæ valde acuminatæ, margine exteriore subconcavo, macula vitrea parva; posticæ abdomen vix superantes, macula vitrea angusta minima.

Saturnia Tyrrhena, *Westw. Proc. Zool. Soc. Lond.* 1849, 51, 17, pl. 8, f. 1.

"Fore wings acute at the tip. Palpi deflexed, their tips appearing just beyond the hairs of the lower part of the face. *Male.*—Fore wings with the outer margin considerably more emarginate than in the female. Antennæ with thirty-two rays on each side (four from each joint); one-third of the apical part of each antenna destitute of rays. *Fem.*—Antennæ slightly pectinated for two-thirds from the base; the two apical rays of each joint almost obsolete; tips serrated."—*Westw.*

Female. Abdomen extending to beyond five-sixths of the breadth of the hind wings. Fore wings much more acuminated than those of *B. Alcinoe;* exterior border slightly concave; vitreous spot small. Hind wings with a very small and narrow vitreous spot.

a, *b*. Port Natal. From M. Gueinzius' collection.
c. Zoolu Country. Presented by G. F. Angas, Esq.

3. Bunæa Phædusa.

Alæ anticæ falcatæ subcinereo-fuscæ, strigis tribus transversis saturatioribus maculaque parva triangulari mediana vitrea; posticæ obscuriores ocello maximo pupilla minuta vitrea, iride lata nigra annulis concentricis anguste sanguinea, pallide punicea, et ferruginea circum cincta.

Saturnia Phædusa, *Westw. ed. Drury*, iii. 34, pl. 24, 25; *Proc. Zool. Soc. Lond.* 1849, 51, 16.

Phalæna Attacus Phædusa, *Drury, Illustr. Exot. Ins.* iii. pl. 24, 25. *Append.*

Bombyx Saturnus, *Fabr. Ent. Syst.* iii. 409; *Oliv. Enc. Méth.* v. 27, 11.

" Palpi short, thin, distinct. Antennæ short; each joint emitting four rays lying flat."—*Westw.*

Sierra Leone.

a. West Africa. Presented by E. Doubleday, Esq.

4. Bunæa Alinda.

Alæ rufo-fuscæ margine externo saturatiore strigisque variis undulatis obscuris præsertim pone medium, macula semiovali mediana vitrea; posticæ ocello magno pupilla vitrea, iride fulva annulo nigro cincta.

Saturnia Alinda, *Westw. ed. Drury*, iii. pl. 26, f. 119. *Proc. Zool. Soc. Lond.* 1849, 50, 15.

Phalæna Attacus Alinda, *Drury, Illustr. Exot. Ins.* iii. 24, pl. 19. *Append.* iii.

Bombyx Alinda, *Oliv. Enc. Méth.* v. 26, 10, pl. 69, f. 6.

Sierra Leone.

5. Bunæa nictitans.

Alæ anticæ margine apicali integro, fusco incarnatæ medio obscuriore, strigo tenuissima angulata prope basin alteraque recta subapicali fuscis punctoque parvo medio vitreo; posticæ concolores ocello magno medio pupilla parva vitrea, iride flavo, annulis nigro, puniceo et albo cincta, strigaque transversa nigra subapicali.

Bombyx nictitans, *Fabr. Syst. Ent.* 558, 6; *Sp. Ins.* ii. 169, 12; *Mant. Ins.* ii. 109, 14; *Ent. Syst.* iii. 1, 413, 19. *Oliv. Enc. Méth. Ins.* v. 28, 17.

Phalæna-Bombyx Attacus nictitans, *Gmel. ed. Syst. Nat.* i. 5, 2404, 469.

Saturnia nictitans, *Westw. Proc. Zool. Soc. Lond.* 1849, 55, 22.

" Palpi short, distinct, deflexed. *Male.*—Antennæ thirty-nine-jointed, with fifty-eight rays on each side (four from each of the twenty-nine or thirty basal joints), the rays lying nearly flat. *Fem.*—Antennæ about forty-two jointed, only thinly serrated, each joint

with two serratures on each side, the basal one most prominent, the antennæ becoming gradually more slender to the tips."—*Westw.*

a. Tropical Africa. Presented by E. Doubleday, Esq.

6. Bunæa Angasana.

Alæ anticæ apice acutæ isabellinæ, fascia pallida subcinerea ante medium, strigaque tenui oblique fusca pone medium maculaque parva semiovali vitrea mediana; posticæ ocello magno nigro, pupilla minuta vitrea, annulis concentricis testaceo, puniceo-albo, et sanguineo cincta.

Saturnia Angasana, *Westw. Proc. Zool. Soc. Lond.* 1849, 52, 19.
——— ———, *Angas, Pl. Amazoolu Lepid.* f. 16.

"*Fem.* Antennæ black, serrated, the two terminal rays of each joint nearly obliterated, with one-fourth of the apex simple."—*Westw.*

a. Port Natal. From M. Gueinzius' collection.

7. Bunæa Alopia.

Mas. *Alæ anticæ fusco-albidæ, striga recta puniceo-alba ante medium maculaque parva triangulari mediana vitrea, strigaque postica recta fusca externe puniceo tincta; posticæ etiam bistrigatæ ocelloque parvo vitreo, iride obscure lutea circulo nigro alteroque late puniceo-albo circumdata.*

Saturnia Alopia, *Westw. Proc. Zool. Soc. Lond.* 1849, 55, 23.

"Palpi distinct, small. *Male.*—Antennæ small, moderately short, the rays flat, thirty-four rays on each side, one-fourth of the antennæ at the tip being destitute of rays."—*Westw.*

Male. Fawn-colour. Wings with two brown bands, which are bordered with brown on the outer side. Hind wings rose-colour in front; ocellus fawn-colour, with a whitish mark in the centre, bordered with black and with reddish white; exterior band forming an obtuse angle at some distance from the ocellus.

a. South Africa? Presented by E. Doubleday, Esq.

8. Bunæa Forda.

Pallide subcinereo-fusca (mas), *pallide cervino-lutea* (fœm.), *striga subobsoleta pone medium, alæ posticæ etiam ocello parvo subvitreo, fusco, medio; alæ posticæ* maris *angulato subcaudatæ*, fœmina *rotundatæ.*

Saturnia Forda, *Westw. Proc. Zool. Soc. Lond.* 1849, 52, 18.

"*Male.* Fore wings very slightly emarginate along the outer margin. Antennæ dark brown, moderately bipectinated, each having about thirty-six rays on each side, a few of the apical joints destitute of rays, and some of the preceding with the second ray gradually becoming obsolete. *Fem.*—Antennæ slightly serrated, the second spur on each side of each joint obliterated."—*Westw.*

a. Port Natal. From M. Gueinzius' collection.

9. Bunæa Ethra.

Alæ omnes apice undulatæ, anticæ subfalcatæ, posticæ in medio in caudam truncatam productæ; fusco-albidæ fusco irroratæ, anticæ dimidio basali pallidiore, strigis tribus fuscis undatis 2a magis distincta mediana et cum ocello parvo medio conjuncta; posticæ antice puniceo-rufæ, ocello maximo; pupilla lunata vitrea iride nigra circulo tenui luteo, 2o nigro, 3o latiore luteo-fulvo, 4o albo; striga basali angulata alterisque duabus pone medium undulatis nigris.

Saturnia Ethra, *Westw. Proc. Zool. Soc. Lond.* 1849, 56, 24, pl. 10, f. 1.

"*Fem.* Fore wings rather narrow and falcate, with the apical margin rather waved. Palpi distinct, very small. Pectinations of the antennæ comparately short; each antenna with thirty-eight rays on each side (four from each joint); about one-fourth of the antennæ at the apex destitute of rays."—*Westw.*

——— ?

10. Bunæa Acetes.

Alæ anticæ apice acutæ obscure fulvæ striga valde undulata cinerea prope basin ocello mediocri mediano fusco et vitreo strigaque recta fusca subapicali; posticæ magis ferrugineæ ocello magno medio pupilla vitrea, iride nigra annulo albo cincta strigaque tenui transversa fusca recta prope medium.

Saturnia Acetes, *Westw. Proc. Zool. Soc. Lond.* 1849, 53, 20.

"*Fem.* Antennæ black, very slightly pectinated, with about thirty-five joints, the first twenty-five emitting a pair of short slender branches from the base, the tip of the joints being also slightly serrated; the ten terminal joints are shorter, each emitting a single branch set on in front of each joint, the branches of the preceding joints being set on the upper and lower edges."—*Westw.*

Cape of Palms.

11. Bunæa Mopsa.

Fulvo-cervina; alæ bifasciatæ, gutta parva vitrea in posticis luteo nigro rufo albidoque marginato.

Fulvous fawn-colour. Wings with a vitreous discal dot, and with two brown whitish-bordered bands; the first band near the base, undulating; the second exterior, straight. Hind wings produced into a short tail, brownish in front; vitreous dot encircled successively with a luteous, a black, a red and a whitish ringlet; luteous ringlet as broad as the red one, which is broader than the black one, but narrower than the whitish one. Length of the body 13 lines; of the wings 52 lines.

a. Western Africa. Presented by E. Doubleday, Esq.

12. Bunæa Dorcas.

Mas. *Cervina, fusco conspersa; alæ basi fulvescentes, fascia exteriore fusca, gutta discali vitrea, in posticis luteo nigro albidoque marginata.*

Male. Fawn-colour. Wings slightly sprinkled with brown, somewhat tawny at the base, with a vitreous discal dot, and with an exterior brown band, which is bordered with a whitish hue on the inner side. Fore wings with the exterior border almost straight, less oblique than that of *B. Mopsa* and of *B. Epinecthea;* band straight. Hind wings produced into a short tail, brownish in front, with the band somewhat curved, contiguous to the ocellus; vitreous dot encircled successively with a luteous, a black and a whitish ringlet; luteous ringlet broader than the whitish one, which is broader than the black one; the latter on its outer side has a reddish hue, which forms a distinct ringlet. Length of the body 13 lines; of the wings 52 lines.

a. Western Africa. Presented by E. Doubleday, Esq.

13. Bunæa Epimethea.

Alæ anticæ subfalcatæ, subfuscæ striga communi subapicali obscura extus pallide subcinereo marginata, macula minuta mediana triangulari vitrea; posticæ acute angulato caudatæ, ocello magno medio fulvo iride nigra apnulo puniceo cinereoque cincta, margine antico alarum obscuriore.

Phalæna-Bombyx Attacus Epimethea, *Drury, Ill. Ins.* ii. pl. 13, f. 1. *Append.* ii. *Cram. Pap. Exot.* ii. 122, pl. 176, f. A. *Gmel. ed. Syst. Nat.* i. 5, 2404, 472.

Bombyx Epimethea, *Fabr. Sp. Ins.* ii. 170, 16; *Mant. Ins.* ii. 109, 18; *Ent. Syst.* iii. 1, 414, 23. *Oliv. Enc. Méth.* v. 29, 21.

Saturnia Epimethea, *Westw. ed. Drury*, ii. 24, pl. 13, f. 1; *Proc. Zool. Soc. Lond.* 1849, 50, 13.

Imbrasia Epimethea, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Recondentes*), 154, 1607.

"Palpi small, distinct, rather dependent, not extending beyond the hairs of the face. *Male.*—Antennæ rather small, with only thirty-four rays on each side, thirteen of the apical joints being destitute of rays."—*Westw.*

Guinea.

a, *b*. West Africa. Presented by E. Doubleday, Esq.

a, *b*. Ashanti. From the Wesleyan Missionary Society's collection.

Madagascar.

14. Bunæa Mangiferæ

Alæ pallide rufescentes; singulæ oculo vitreo ferrugineo cincto.

Saturnia Mangiferæ, *Sganzin MSS. Boisd. Faun. Ent. Mad. Bomb. et Maur.* 89, 2.

Madagascar.

Genus 5. SAGANA.

Mas. Antennæ latissime pectinatæ, thorace non longiores; rami graciles, ciliati, duplicati, æqualiter longi. Abdomen sat gracile. Alæ amplæ, macula magna sublunata vitrea; anticæ falcatæ, apud costæ apicem subconvexæ, margine exteriore valde concavo et obliquo; posticæ valde latiores, abdomen triente superantes.

Saturnia, p., *Westw.*

Male. Antennæ very deeply pectinated, not longer than the thorax; branches of equal length, slender, ciliated, in pairs. Abdomen rather slender, extending to about two-thirds of the breadth of the hind wings. Wings ample, each with a large irregularly lunate vitreous spot, which is intersected by the discal veinlet. Fore wings falcate, slightly convex towards the tip of the costa, very concave and very oblique along the exterior border; interior angle distinct, obtuse; second inferior vein more than thrice further from the third than from the first. Hind wings very much broader than the fore wings.

1. Sagana Sapotoza.

Mas. *Testacea; caput fuscum; abdomen apice subtusque roseum; pedes rosei; alæ sordide luteæ, fascia basim versus, margine exteriore cervino, macula vitrea fusco marginata; anticæ macula subapicali nigra albo cyaneoque ex parte marginata, guttaque subapicali rufo-alba; posticæ lunulis fuscis rufo-albo extus marginatis.*

Saturnia Sapotoza, *Westw. Ann. Nat. Hist. 2nd Ser.* xv. 299.

Male. Body testaceous. Head brown. Abdomen rosy at the tip and beneath. Legs rosy. Wings dingy pale luteous, with a clearer band towards the base; exterior border fawn-colour; vitreous spot with a dark brown border. Fore wings with a black subapical spot, which is partly bordered with white and with blue, and has near it a white dot mingled with red. Hind wings with a row of dark brown lunules, which are bordered on the outer side with mingled red and white. Length of the body 10 lines; of the wings 32 lines.

a, *b*. Santa Fé de Bogotà. From Mr. Isaacson's collection.

Genus 6. COPAXA.

Corpus robustum. Palpi validi, pilosi, brevissimi. Antennæ, thorace perpaullo breviores. Alæ latissimæ, non longæ; anticæ subfalcatæ, apud costam valde convexæ, margine exteriore subrecto vix obliquo; posticæ multo latiores, abdomen longe superantes. *Mas.*—Antennæ latissime pectinatæ; rami duplicati, æquales, ciliati. *Fœm.*—Antennæ late pectinatæ; rami subnudi, sat remoti, non duplicati.

Body stout. Proboscis not visible. Palpi stout, pilose, very short. Antennæ hardly as long as the thorax. Legs stout, pilose;

hind tibiæ with two very minute apical spurs. Wings very broad, not long. Fore wings very convex in front, very slightly falcate and almost rectangular at the tips, almost straight and very slightly oblique along the exterior border; interior angle rounded; discal areolet closed; three inferior veins; second remote from the first and a little more remote from the third. Hind wings much broader than the fore wings, extending far beyond the abdomen; exterior border convex, forming an almost right angle with the interior border. *Male.*—Antennæ very deeply pectinated; branches in pairs, ciliated, of equal length. *Female.*—Antennæ deeply pectinated; branches single, almost bare, rather remote from each other, about twenty-six on each side.

1. Copaxa Canella.

Mas et fœm. *Cervina; antennæ testaceæ; thorax antice canus; alæ fascia fusca, macula vitrea mediocri cervino flavo fuscoque marginata; anticæ costa cana, fascia basim versus fusca, striga antica lutea, plaga antica subapicali testacea, fascia exteriore undulosa pallida, macula oblonga nigra strigaque alba rufo marginata apicalibus; posticæ fasciis duabus exterioribus fuscis unaque submarginali pallida.*

Saturnia Canella, *MSS.*

Male. Fawn-colour. Antennæ testaceous, very deeply pectinated; the branches in pairs, which are of equal length. Thorax hoary in front. Abdomen paler than the thorax. Wings with a brown band, which extends from near the tips of the fore wings to somewhat before the middle of the interior border of the hind wings; vitreous spot of moderate size, slightly oblong and transverse, traversed by an angular veinlet, encircled by three ringlets; first ringlet dull fawn-colour, rather broad; second yellow, third brown, both very narrow. Fore wings with an undulating pale band near the exterior border, and with a brown band near the base; costa hoary, with a luteous streak behind it near the base, and a larger testaceous space behind it near the tip, where there is an oblong black spot, which emits a white red-bordered streak. Hind wings with two exterior brown bands, of which the inner one is much more undulating than the other; an indistinct submarginal pale band. *Female.*—Like the male. Antennæ deeply pectinated; branches single. Length of the body 12—14 lines; of the wings 46—50 lines.

Var. β. Male. Wings paler, and with the submarginal pale band obsolete. Hind wings with the vitreous spot rather smaller and more oblong.

Var. γ. *Male.* Reddish fawn-colour.

a, *b*. Brazil. From M. Becker's collection.
c. Rio Janeiro. From Mr. Stevens' collection.
d. Rio Janeiro.

2. COPAXA DECRESCENS.

Mas. *Cervina; caput et thorax antice albida; alæ fusco trifasciatæ, macula vitrea fusco flavoque marginata; anticæ fascia basim versus undulosa, striga basim versus undulosa, striga subcostali ochracea, plaga subapicali cervina, strigaque apicali fusca albo marginata.* Fœm.—*Thorax pallide fuscus; abdomen testaceum; alæ viridi-fuscæ, fasciis nonnullis subpurpureis, macula vitrea majore.*

Male. Fawn-colour. Head and thorax in front whitish. Wings with three brownish bands; first or inmost band straight, darker and more distinct than the others, and extending from near the tips of the fore wings to somewhat before the middle of the interior border of the hind wings, bordered with lilac on the outer side; second undulating, indistinct in the fore wings; third marginal in the fore wings, but far from the border in the hind wings; a slight tinge of lilac about the two latter bands; vitreous spot encircled with brown and with yellow, small in the fore wings, very small in the hind wings. Fore wings with an undulating brown band near the base, traversing an ochraceous streak behind the costa; a pale fawn-coloured space by the costa near the tip, where there is a brown white-bordered streak. *Female.*—Thorax pale brown. Abdomen testaceous. Wings greenish brown, with several lilac bands, which are more or less diffuse; vitreous spot angular on the interior side, of moderate size in the fore wings, small in the hind wings. Length of the body 12—15 lines; of the wings 50—54 lines.

a. Rio Janeiro. From Mr. Stevens' collection.
b. Brazil. From M. Becker's collection.
c. Santa Fé de Bagotà. From Mr. Stevens' collection.

Var. β. Fœm. *Fusco-cervina; antennæ citrinæ; abdomen albido-testaceum; thorax antice subpurpureus; alæ macula vitrea mediocri subpentagona fusco luteoque marginata, fasciis duabus subpurpureis; anticæ costa plagisque duabus subpurpureis, fascia costali fusca, striga apicali albida; posticæ fascia exteriore subpurpurea duplicata guttisque nigricantibus.*

Female. Brownish fawn-colour, much paler beneath. Antennæ pale lemon-colour. Abdomen whitish testaceous. Thorax in front and costa of the fore wings lilac; a brown band across the costa beyond two-thirds of the length. Wings with a vitreous spot of moderate size, irregularly pentagonal, bordered with brown and luteous; both margins very narrow; two lilac bands; one extending from near the tips of the fore wings to a little beyond one-third of the breadth of the hind wings; the other exterior, irregular and undulating, double in the hind wings, where its inner division is accompanied by a row of blackish dots. Fore wings with two large lilac blotches between the base and the vitreous spot, and with a whitish apical streak; vitreous spot rather larger than that of the hind wings. Length of the body 15 lines; of the wings 54 lines.

Brazil.

3. COPAXA EXPANDENS.

Mas. *Luteo-flava; caput antice fulvum; antennæ testaceæ; thorax antice cinereus; tibiæ tarsique supra rufescentia; alæ fascia una fusca alteraque lutea; anticæ fusco bivittatæ et bifasciatæ, maculisque tribus vitreis fusco cinctis; posticæ fascia angulosa fusca maculaque una vitrea.*

Male. Luteous-yellow. Head tawny in front. Antennæ testaceous. Thorax in front and costa of the fore wings cinereous. Abdomen not extending beyond half the breadth of the hind wings. Tibiæ and tarsi reddish above. Wings with a brown band, which extends from near the tips of the fore wings to rather beyond one-third of the breadth of the hind wings, and with an indistinct luteous band, which crosses the vitreous spots and traverses the brown band very obliquely. Fore wings with two oblique brown stripes, the hind one diffuse exteriorly, and with two slender undulating brown bands, one near the base, the other exterior and much more oblique; three small vitreous spots with brown ringlets placed transversely, the hindmost traversed by the veinlet which traverses the discal areolet. Hind wings with one small vitreous spot, with a slender pale brown zigzag band, whose inner angles have dark brown spots, and with a row of exterior curved pale brown streaks. Length of the body 13 lines; of the wings 52 lines.

a. Venezuela. From Mr. Dyson's collecion.

Genus 7. ANTHERÆA.

Corpus robustum. Alæ amplæ, ocello vitreo; anticæ sæpissime plus minusve falcatæ, apud costam plus minusve convexæ, margine exteriore plus minusve unduloso; posticæ non latiores quam longæ, abdomen plus minusve superantes.

Antheræa, *Hübn. Verz. Schmett.* 152.
Phalæna-Bombyx Attacus, p., *Cram.*; *Gmel.*
Bombyx, p., *Fabr.*; *Oliv.*
Saturnia, p., *Boisd.*; *Westw.*

Body stout. Wings ample, each with an ocellus, whose disk is partly or wholly vitreous. Fore wings very generally more or less falcate; costa more or less convex towards the tip; exterior border generally more or less undulating. Hind wings as long as or longer than broad, very little broader than the fore wings, extending more or less beyond the abdomen.

The principal characters which distinguish this group from *Attacus* are the greater size of the abdomen, the different colouring of the wings, the less development of the hind wings, and the vitreous spot, which has another form.

Africa.

A. Alæ fasciis angulosis.
  A. Alæ flavescentes. - - - - - Arata, *Westw.*
  B. Alæ fuscescentes. - - - - Tyrrhea, *Cram.*
B. Alæ fasciis non angulosis.
  A. Alæ flavescentes.
    A. Alæ anticæ ocellis parvis. - - - Dione, *Fabr.*
    B. Alæ anticæ ocellis maximis. - - Hersilia, *Westw.*
  B. Alæ fuscescentes.
    A. Alæ anticæ ocellis magnis. - - - Cytherea, *Fabr.*
    B. Alæ anticæ ocellis parvis. - - Belina, *Westw.*
C. Alæ rubræ. - - - - - - Menippe, *Westw.*

Group 1.

Mas. Antennæ latissime pectinatæ, ramis ciliatis duplicatis æqualiter longis. Alæ anticæ subfalcatæ, apud costæ apicem convexæ, margine exteriore vix concavo, macula vitrea parva subtrigona; posticæ abdomen triente superantes, macula vitrea minima lineari.

Male. Antennæ extremely deeply pectinated; branches of equal length, slender, ciliated, in pairs. Abdomen extending to much beyond half the breadth of the hind wings. Fore wings convex towards the tip of the costa, very slightly falcate at the tips, hardly concave along the exterior border; vitreous spot small, subtriangular; the sides and angles somewhat rounded. Hind wings with the vitreous spot confined to a line in the black pupil of the ocellus.

1. ANTHERÆA ARATA.

Alæ flavæ; anticæ apice acutæ basi livide maculatæ, medio ocello livido cincto circulo tenui albo, alteroque purpureo marginato, linea tenui dentata media, strigaque obliqua subundata; posticæ ocello magno multiannulato ornatæ.

Saturnia Arata, *Westw. Proc. Zool. Soc. Lond.* 1849, 41, 3, pl. 7, f. 2.

"Fore wings nearly alike in both sexes, being but very slightly emarginated in the male, with the tips acute. Palpi short, distinct and broad; basal joint with scales extending beyond the second joint. *Male.*—Antennæ thirty-two jointed, with forty-eight rays on each side, the two apical rays of each joint being rather shorter than the two basal ones. *Female.*—Antennæ thirty-seven jointed, the rays being about three times as long as the thickness of the antennæ, and the two apical rays of each joint being quite short." *Westw.*

a. Ashanti. From the Wesleyan Missionary Society's collection.
b. Sierra Leone. Presented by the Rev. D. F. Morgan.
c, d. Port Natal. From M. Gueinzius' collection.

Group 2.

Mas et fœm. Alæ mediocriter longæ et latæ, macula vitrea minima æquali; anticæ apud costam subconvexæ, non falcatæ. *Mas.*—Antennæ latissime pectinatæ; rami duplicati, æquales, graciles, ciliati. Alæ posticæ abdomen longe superantes. *Fœm.*—Antennæ subserratæ. Abdomen alas posticas perpaullo superantes.

Wings moderately long and broad; vitreous spot very small, of equal size in each wing of both sexes. Fore wings slightly convex along the costa, not falcate, but obtusely angular at the tips, almost straight, and rather oblique along the exterior border. *Male.*—Antennæ very deeply pectinated; branches of equal length, slender, ciliated, in pairs. Abdomen hardly stout, extending to

two-thirds of the breadth of the hind wings. Fore wings a little more convex along the costa than in the female. *Female.*—Antennæ minutely serrated. Abdomen stout, extending to five-sixths of the breadth of the hind wings.

2. Antheræa Belina.

Alæ anticæ flavo-subcinereæ, striga subangulata ante, alteraque fere recta pone medium, ocello mediano hyalino fulvo cincto ; posticæ rubidæ ocello magno vitreo iride fulva nigro circumdata strigaque subapicali alba, fusco externe marginata.

Saturnia Belina, *Westw. Proc. Zool. Soc. Lond.* 1849, 41, 4, pl. 8, f. 2.

"Fore wings nearly alike in both sexes, the outer margin scarcely emarginate. Palpi flattened, short, deflexed. *Male.*—Antennæ thirty-five jointed, with fifty-six rays on each side, the rays rather long; the two basal rays of each joint obliquely porrected, so that the rays form four series, instead of all being on the same plane; the six apical joints minute, and not producing rays. *Female.*—Antennæ setaceous, the rays being scarcely visible without a lens."—*Westw.*

a. Zoolu Country. Presented by G. F. Angas, Esq.
b, c. Port Natal. From M. Gueinzius' collection.

Group 3.

Corpus robustum. Alæ mediocriter longæ et latæ, macula vitrea oblonga; anticæ non falcatæ, apud costam vix convexæ; posticæ macula vitrea minore. *Mas.*—Antennæ latissime pectinatæ, apices versus subpectinatæ. Alæ posticæ abdomen sat longe superantes. *Fœm.*—Antennæ serratæ, ramis inæqualibus. Alæ posticæ abdomen paullo superantes.

Body stout. Wings moderately long and broad; vitreous spot oblong, not intersected. Fore wings hardly convex along the costa, not falcate, but almost rectangular at the tips, rather oblique, and almost straight along the exterior border; vitreous spot much larger than that of the hind wings. *Male.*—Antennæ extremely deeply pectinated, except near the tips, where they are very slightly pectinated; branches of equal length, slender, ciliated, in pairs. Abdomen extending to beyond two-thirds of the breadth of the hind wings. Vitreous spot small in the fore wings, very small in the

hind wings. *Female.*—Antennæ serrated; the teeth alternately short and very short. Abdomen extending to beyond three-fourths of the breadth of the hind wings. Vitreous spot rather large in the fore wings, small in the hind wings.

3. Antheræa Cytherea.

Alæ anticæ margine externo parum emarginato, subcinereæ, strigis duabus albis, anteriore undata; omnes ocello magno (in posticis majore) vitreo, parte vitrea in anticis magna ovali, in posticis parva rotundatâ, iride flava annulo nigro alteroque albo circumdata.

Bombyx Cytherea, *Fabr. Syst. Ent.* 557, 5; *Sp. Ins.* ii. 168, 8; *Mant. Ins.* ii. 108, 7; *Ent. Syst.* iii. 1, 410, 10. *Oliv. Enc. Méth. Ins.* v. 26, 8.

Phalæna-Bombyx Attacus Capensis, *Cram. Pap. Exot.* iv. 24, pl. 302, f. A. B. 74, pl. 325, f. G. (fœm.) *Sulz. Hist. Ins.* pl. 21, f. 1. *Gmel. ed. Syst. Nat.* i. 5, 2403, 462.

Echidna communiformis Cytherea, *Hübn. Samml. Exot. Schmett.* i. *Lep.* iii. *Bomb.* i. *Sphingoides*, i. *Echidnæ* B. *Communiformes*, b. f. 3, 4.

Aglia Cytherea, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Lunatæ*), 152.

Saturnia Cytherea, *Westw. Proc. Zool. Soc. Lond.* 1849, 44, 8.

"Palpi short, broad, not extending beyond the hairs of the face. *Male.*—Antennæ moderately broad, with 126 rays on each side, affixed obliquely, the joints being very short, the ten terminal joints very small, with only one ray on each side, gradually diminishing in size. *Fem.*—Antennæ slightly serrated, each joint emitting two oblique serrations on each side, the basal pair being the largest, the size of the serrations gradually diminishing to the tip."—*Westw.*

A very pale variety of the female of this species has unusually small vitreous spots.

a—g. Cape. From Mr. Milne's collection.
h, i. Cape. From M. Dregé's collection.
j—l. South Africa. Presented by Dr. A. Smith.
m. West Africa. Presented by E. Doubleday, Esq.
n. Zoolu Country. Presented by G. F. Angas, Esq.
o. Cape? From Mr. Stevens' collection.

4. Antheræa Hersilia.

Mas. *Alæ integræ flavæ fusco subirroratæ, striga angulata transversa ante medium alteraque ante apicem subundata fuscis, ocello magno mediano vitreo iride lata obscure lutea, linea tenui circulari nigra circumdata; posticæ basi roseo-flavæ, ocello maximo mediano vitreo circulis concentricis obscure luteo, nigro, late rufo et albo cincto, strigaque subapicali subundata fusca.*

Saturnia Hersilia, *Westw. Proc. Zool. Soc. Lond.* 1847, 42, 5, pl. 9, f. 1.

"*Male.* Fore wings entire, slightly rounded along the outer margin. Antennæ chestnut-yellow, rather broad and flat, with forty-eight rays on each side, the two apical rays being very short, four rays being produced from each joint."—*Westw.*

a. Congo. Presented by Sir J. Richardson.

5. Antheræa Menippe.

Mas. *Fusca; caput apud antennas albidum; antennæ nigricantes; thorax postice roseus; pectus et abdomen alba; alæ rufæ, albo bifasciatæ, margine exteriore cervino, ocello atro pupilla vitrea margine albo, subtus cervinæ, albido variæ.*

Saturnia Menippe, *Westw. Proc. Zool. Soc. Lond.* 1849, 43, 6, pl. 9, f. 2.

Male. Fore wings entire and slightly rounded along the outer margin. Antennæ dark brown, rather broad, with fifty-two joints in each, and about 100 rays on each side, extending consequently nearly to the extreme tip. *Female.*—Antennæ nearly resembling those of the male.

Male. Body brown. Head whitish about the base of the antennæ. Antennæ blackish, deeply pectinated to the tips; branches in pairs, which are of equal length. Thorax rosy red hindward. Pectus and abdomen white, the latter extending to beyond one-half the breadth of the hind wings. Legs mostly brown. Wings red, pale fawn-colour along the border, and with two white bands; first band near the base, more irregular than the second, which is beyond the discal ocellus; the latter is deep black, with a white border, and includes a rather large vitreous spot, which is partly

flecked with black; under side mostly fawn-colour, which in the hind wings especially is varied with white. Length of the body 13 lines; of the wings 50 lines.

a. Port Natal. From M. Gueinzius' collection.

6. Antheræa Tyrrhea.

Alæ subcinereæ nigro irroratæ; anticæ striga ante medium alba valde dentata; omnes ocello mediano (majore in alis posticis) vitreo, iride subcinereo fulva annulis concentricis nigro, fulvo et albo circumcincta; omnes etiam striga versus marginem duplicata undata communi.

Saturnia Tyrrhea, *Westw. Proc. Zool. Soc. Lond.* 1849, 43, 7.
Bombyx Tyrrhea, *Fabr. Gen. Ins. Mant.* 278; *Sp. Ins.* ii. 171, 20; *Mant. Ins.* ii. 109, 22; *Ent. Syst.* iii. 1, 415, 27. *Oliv. Enc. Méth. Ins.* v. 30, 25, pl. 70, f. 3.
Phalæna-Bombyx Attacus Tyrrhea, *Cram. Pap. Exot.* i. 71, pl. 46, f. A. *Gmel. ed. Syst. Nat.* i. 5, 2407, 482.
Aglia Tirrhæa, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Lunatæ*), 152, 1594.

"Palpi distinct, very short. *Male.*—Antennæ moderately broad and flat, with fifty-two rays on each side; the four or five terminal joints very short, without producing any rays; the rays are for the most part of nearly equal length, so that the broad part of the antennæ has its sides nearly parallel. *Female.*—Fore wings with the outer margin entire. Antennæ compressed, with scarcely any rudiment of pectinations.

a. South Africa. Presented by Dr. A. Smith.
b. Cape. From M. Dregé's collection.

7. Antheræa Dione.

Alæ sulphureo-flavæ; anticæ in mare parum falcatæ, strigis duabus, anteriore antice recta, postice dentata carnea, posteriore (communi) recta obscuriore; anticæ etiam plaga albo-carnea basali alteraque versus apicem costæ nubilaque lata undata pone strigam externam subcinereo-carneis; omnes in medio ocello (in posticis majore), pupilla minuta nitrea, iride fulva annulis nigro, albo carneoque circumcincta.

Saturnia Dione, *Westw. Proc. Zool. Soc. Lond.* 1849, 44, 9.
Phalæna Guineensis, *Petiver, Guzoph.* pl. 29, f. 3. 478.

Phalæna Paphia, *Linn. Syst. Nat.* ed. 10, ex parte.
Bombyx Dione, *Fabr. Ent. Syst.* iii. 1, 410, 9.
Bombyx Petiveri, *Guérin, Ann. Soc. Sericole.*
Var. Saturnia Wahlbergii, *Boisduval, Delegorgue. Voy. dans l'Afriq. Austr.* ii. 600. *Herr.-Schæff. Lép. Exot. Sp. Ser.* i. pl. 20, f. 95.

"Palpi short, distinct, deflexed. *Male.*—Antennæ rather broad and flat, with forty-four rays on each side, four being emitted from each joint; about six of the terminal joints furnished only with short, gradually diminishing spurs. *Female.*—Fore wings not so subfalcate as in the male, but with the apical margin slightly emarginate. Antennæ almost filiform."—*Westw.*

Male. Luteous. Wings with two indented purplish bands; the first near the base; the second submarginal, incomplete on the hind wings; the second is accompanied on the inner side by a more regular and slender lilac black-bordered band; and between the latter and the inner band there is on each wing a limpid ocellus, whose luteous border is encircled by a black ringlet, and the latter by a purplish ringlet. Fore wings purplish about the base of the costa.

Var. β. Fœm. *Lutea; tibiæ tarsisque obscure fusca; alæ fasciis tribus purpurascentibus; 1a non bene determinata, intus fusco marginata, 2a recta fusco marginata; 3a lata, incompleta, macula vitrea luteo-fusco purpureoque marginata.*

Luteous. Tibiæ and tarsi dark gray. Wings with an indistinct irregular purplish band, extending at one-third of the length from the costa to the interior border of the hind wings, and bordered with brown on the inner side; a more distinct and straight band extends from near the tip of the costa to two-thirds of the interior border of the hind wings, and is bordered with brown on both sides; it is remote from the ocellus of the fore-wings, but touches that of the hind wings; a broad irregular and incomplete exterior lilac band; vitreous spot encircled with luteous brown and purple, which circlets are much broader and brighter in the hind wings than in the fore wings. Length of the body 18 lines; of the wings 52 lines.

Var. γ. Fœm. *Pallide cervina; alæ apud marginem exteriorem luteæ, fasciis duabus albidis, 1a diffusa intus fusco marginata, altera latiore, fascia inter media cana fusco marginata, macula vitrea mediocri e luteo nigro et subpurpureo marginata.*

Female. Pale fawn-colour. Wings luteous along the exterior border, with two irregular whitish bands; the inner band diffuse and indistinct, bordered with brown on the inner side; the outer one broader and more distinct, widely interrupted in the hind wings, angular on the outer side, accompanied on the inner side by a narrow hoary band, which is bordered with brown on each side; vitreous spot of moderate size, encircled successively with luteous, with black and with lilac, which rings are much broader and brighter in the hind wings than in the fore wings, and in the former the lilac hue is encircled by a reddish tinge. Length of the body 15 lines; of the wings 53 lines.

Madagascar.

a. Congo. Presented by Sir J. Richardson.
b. Congo.
c. Ashanti. From the Wesleyan Missionary Society's collection.
d. Sierra Leone. Presented by the Rev. D. F. Morgan.
e, f. Port Natal. From M. Gueinzius' collection.

8. Antheræa Suraka.

Alæ anticæ ferrugineo cinnamomeæ strigis duabus obscuris interjecto oculo obsoleto; posticæ roseo-subviolaceæ, annulo intensiore includente oculum ferrugineum iride nigro.

Saturnia Suraka, *Boisd. Faune Ent. Mad. Bomb. et Maur. Lep.* 89, 3, pl. 12, f. 4.

Surakak, Madagascar.

Asia.

A. Alæ fasciis non undulosis.
  A. Alæ maculis vitreis rotundis.
    a. Alæ anticæ ocellatæ. - - - - Mylitta, *Drury.*
    b. Alæ anticæ non ocellatæ.
      a. Alæ posticæ ocellatæ. - - - - Lola, *Westw.*
      b. Alæ posticæ non ocellatæ. - - Zuleika, *Westw.*
  B. Alæ maculis vitreis angustis. - - - Assama, *Westw.*
B. Alæ fasciis undulosis.
  A. Alæ apud margines non cinereæ.

A. Alæ cervinæ.
a. Alarum posticarum fasciæ undulosæ ocello remotæ. Simla, *Westw.*
b. Alarum posticarum fasciæ undulosæ ocello contiguæ.
i. Alæ anticæ fasciis undulosis. - Thibeta, *Westw.*
ii. Alæ anticæ fasciis non undulosis. - Jana, *Cram.*
B. Alæ flavæ. - - - - - Katinka, *Westw.*
B. Alæ apud margines cinereæ. - - - Larissa, *Westw.*

Group 1.

Antennæ thoracis longitudine. Alæ macula vitrea antica majore postica minore. *Mas.*—Antennæ latissime pectinatæ, ramis ciliatis duplicatis æqualiter longis. Abdomen sat robustum. Alæ anticæ falcatæ, apud costæ apicem valde convexæ, margine exteriore concavo. *Fœm.*—Antennæ mediocriter pectinatæ, ramis alterne longiusculis et abbreviatis. Abdomen crassum. Alæ anticæ vix falcatæ, apud costæ apicem subconvexæ, margine exteriore vix concavo.

Antennæ as long as the thorax. Abdomen extending to about two-thirds of the breadth of the hind wings. Vitreous spot much larger in the fore wings than in the hind wings, traversed by the discal veinlet. *Male.*—Antennæ extremely deeply pectinated; branches in pairs, slender, ciliated, of equal length. Abdomen rather thick. Fore wings falcate, very convex towards the tip of the costa; exterior border concave. *Female.*—Antennæ moderately pectinated; branches in pairs, of which one branch is hardly half the length of the other. Abdomen very thick. Fore wings hardly falcate, slightly convex towards the tip of the costa, hardly concave along the exterior border.

9. Antheræa Mylitta.

Alæ cervino-fulvæ striga ferruginea submarginali ocelloque fenestrato in medio linea diviso.

Phalæna-Bombyx Attacus Mylitta, *Drury, Ill. Exot. Ins.* ii. 8, pl. 5, f. 1. *App.* ii. *Gmel. ed. Syst. Nat.* i. 5, 2403, 463.
——— ———, *Seba, Mus.* iv. pl. 23, f. 5, 6. *Rumph. Amboin.* iii. 113, pl. 75. *Petiv. Gazoph.* pl. 29, f. 3.
Bombyx Mylitta, *Fabr. Syst. Ent.* 558, 6; *Spec. Ins.* ii. 168, 7; *Mant. Ins.* ii. 108, 8; *Ent. Syst.* iii. 1, 411, 11. *Oliv. Enc. Méth. Ins.* v. 26, 9, pl. 69, f. 5.

Phalæna-Bombyx Attacus Paphia, *Linn. Syst. Nat.* i. 2, 809, 4; *Mus. Lud. Ulr.* 369. *Cram. Pap. Exot.* ii. 78, 81, 82, pl. 147, f. A, B; pl. 148, f. A. *Gmel. ed. Syst. Nat.* i. 5, 2402, 4. *Roxb. Trans. Linn. Soc.* vii. 33.

Antheræa Mylitta, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Lunatæ*) 152, 1589.

Saturnia Mylitta, *Westw. ed. Drury*, ii. 10, pl. 5, f. 1.

Bombyx Paphia, *Fabr. Syst. Ent.* 557, 4; *Spec. Ins.* ii. 168, 4; *Mant. Ins.* ii. 108, 5; *Ent. Syst.* iii. 1, 409, 7. *Oliv. Enc. Méth. Ins.* v. 25, 6.

Antheræa Paphia, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Lunatæ*) 152, 1590.

Saturnia Paphia, *Helfer, Journ. Asiat. Soc. Beng.* vi. 426.

Var. Saturnia Pernyi, *Guér. Rev. et Mag. de Zool.* (1855) 297, pl. 6, f. 1.

Tusseh Silkworm Moth.

Var. Male. Ferruginous-red. Wings with a darker band near the exterior border, which is fawn-coloured; this band is partly bordered with lilac on the outer side, and expands into a spot at the tips of the fore wings; ocellus with a very small vitreous centre, which is encircled with yellow and with fawn-colour, the latter ringlet is broad, and is bordered with red and white on the inner side, and with yellow and brown on the outer side. Fore wings gray along the costa, beneath which towards the tip there is a pale ferruginous streak. Length of the body 16 lines; of the wings 66 lines.

a, *b*. Silhet. Presented by E. Doubleday, Esq.
c—*i*. North India. From Mr. James' collection.
j. Silhet. Presented by J. C. Dale, Esq.
k. Silhet. From the Rev. J. Stainforth's collection.
l, *m*. East Indies. From Mr. Milne's collection.
n, *o*. Ceylon. From the Rev. J. Wenham's collection.
p. North India. From Dr. Hooker's collection.
q. ———?

Group 2.

Mas. Corpus sat robustum. Antennæ late pectinatæ, thoracis longitudine. Alæ ocellatæ, longiusculæ, mediocriter latæ; anticæ falcatæ, apud costæ apicem subconvexæ, margine exteriore undulato perobliquo; posticæ latiores, ocello majore, abdomen triente superantes. *Fœm.*—Corpus robustum. Antennæ mediocriter pectinatæ, ramis alternis brevisculis. Alæ anticæ vix falcatæ, margine exteriore obliquo vix concavo; posticæ abdomen perpaullo superantes.

Male. Body rather stout. Antennæ deeply pectinated, as long as the thorax. Abdomen extending to two-thirds of the breadth of the hind wings. Wings rather long, moderately broad, each with an ocellus. Fore wings falcate, slightly convex towards the tip of the costa, undulating and very oblique along the exterior border; interior border rounded; first and second inferior angles contiguous; third remote. Hind wings broader than the fore wings; ocellus larger. *Female*—Body stout. Antennæ moderately pectinated; branches alternately long and short. Abdomen extending to five-sixths of the breadth of the hind wings. Fore wings hardly falcate, oblique and hardly concave along the exterior border.

10. Antheræa Assama.

Alæ supra saturate fulvo-ferrugineæ, ocello parvo fulvo, antice fusco notatæ, strigis duabus subcinereis, pone medium alarum margine postico subpallidiore; anticæ costa albida.

Saturnia Assama, *Westw. Cab. Orient. Ent.* 41, pl. 20, f. 2.
Saturnia Assamensis, *Helfer, Journ. Asiat. Soc. Bengal*, vi. 43, 8.

Assam.

a, *b*. Ceylon. From the Rev. J. Wenham's collection.
c. Silhet. Presented by E. Doubleday, Esq.
d, *e*. Silhet. From the Rev. J. Stainforth's collection.
f. ———?

11. Antheræa Simla.

Mas et fœm. *Alæ anticæ carneo-fulvæ, costa fasciaque obliqua ante medium, postice attenuata subalbidis, striga punicea prope basim alteraque obliqua mediana magis fusca, ocello obscuriore mediana margineque postico lato subcinereo-fulvo; posticæ basi pallide puniceæ, fascia tenui ante alterisque duabus undatis pone medium obscurioribus, ocello magno nigro-fulvo et albo vario, interjecto, margine postico subcinereo-fulvescente.*

Saturnia Simla, *Westw. Cab. Orient. Ent.* 41, pl. 20, f. 1.

Simlah, Upper India.

a. North India. Presented by General Hearsay.
b—*e*. North India. From Mr. Stevens' collection.

12. Antheræa Larissa.

Mas. *Fulvo-rufescens; thorax antice subcinereus; alæ supra fulvæ disco anticarum in medio saturatiore, strigis tribus subcinereo-fuscis valde undatis singulaque ocello subcinereo, antice rufo-fusco, medio vitreo ornata, costa anticarum subcinerea, apicibusque luteo-cinereis.*

Saturnia Latissa, *Westw. Cab, Orient. Ent.* 49, pl. 24, f. 1.

Fore wings of the male much hooked or sickle-shaped.

Java.

13. Antheræa Thibeta.

Mas. *Alæ anticæ flavæ, squamis cinereis, præsertim pone medium, variegatæ, striga angusta valde obliqua prope basim; omnes ocello fere æquali ovali medio extus fulvo puncto nigro incluso, pone medium lineis duabus contiguis valde undulatis, macula parva nigra obliqua strigaque carnia obliqua contigua, subapicalibus; posticæ basi subcarneo, medio flavo variegatæ, striga arcuata inter basim et medium lineisque tribus obscurioribus pone ocellum, fascia lata submarginali cinereo-fusco lunulisque fulvis externis.*

Saturnia Thibeta, *Westw. Ann. Nat. Hist.* 2nd *Ser.* xv. 302.

a. North India, near Thibet. Presented by Major Charlton.

14. Antheræa Jana.

Alæ falcatæ concolores rufo-luteæ, strigis fuscis, quæque macula ocellari.

Phalæna Attacus Jana, *Cram. Pap. Exot.* iv. 220, pl. 396, f. A.
Bombyx Jana, *Oliv. Enc. Méth. Ins.* v. 28, 16.
Antheræa Jana, *Hübn. Verz. Schmett.* (*Phalænæ Sphingoides Echidnæ Lunatæ*) 152, 1591.

Java.

Group 3.

Corpus vix robustum. Palpi brevissimi. Antennæ thorace breviores. Alæ mediocriter longæ latæque, ocello subvestito; anticæ apud costam vix convexæ, apice rotundatæ, margine exteriore obliquo; posticæ abdomen longe superantes. *Mas.*—Antennæ late

pectinatæ; rami graciles, ciliati, duplicati, æqualiter longi. Abdomen robustum. Alæ anticæ sæpissime plus minusve falcatæ, margine exteriore perobliquo plus minusve concavo; posticæ abdomen dimidio superantes. *Fœm.*—Antennæ subpectinatæ; rami validi, simplices. Abdomen robustum aut crassum. Alæ anticæ non falcatæ, margine exteriore obliquo recto; posticæ abdomen paullo superantes.

Body hardly stout. Palpi very short. Antennæ shorter than the thorax. Abdomen not extending so far as the hind wings. Legs rather stout; hind tibiæ with two minute apical spurs. Wings moderately long and broad; each with an ocellus, whose disk is thinly clothed with hairs. Fore wings hardly convex along the costa, rounded at the tips, oblique along the exterior border; interior angle rounded; discal areolet closed; second inferior vein a little further from the third than from the first. *Male.*—Antennæ deeply pectinated; branches of equal length, slender, ciliated, in pairs. Abdomen stout, extending to half the breadth of the hind wings. Fore wings generally more or less falcate at the tips, more or less concave and very oblique along the exterior border. *Female.*—Antennæ minutely pectinated; branches stout, single. Abdomen stout or very stout, extending to three-fourths of the breadth of the hind wings. Fore wings not falcate, oblique and straight along the exterior border.

15. Antheræa Katinka.

Alæ flavæ, singula oculo magno fulvo-fusco iride purpurascente, lunula tenui alba pupillaque angusta nigra; pone medium triplici serie strigarum nigrarum valde undata et dentata, interna obsoletiore, externa alarum anticarum in macula nigra subapicali terminata, lunulisque angustis, submarginalibus albis; anticæ fascia dentata pallide rosea subbasali maculaque apicali fulva; posticæ etiam striga abbreviata ad angulum ani rosea.

Saturnia Katinka, *Westw. Cab. Orient. Ent.* 25, pl. 12, f. 2.

Assam.

a, *b*. Silhet. From the Rev. J. Stainforth's collection.
c, *d*. Java. From Mr. Argent's collection.
e, *f*. Java. From the East India Company's collection.
g, *h*. Silhet. Presented by E. Doubleday, Esq.
i. East Indies. From Mr. Sowerby's collection.

16. Antheræa Lola.

Alæ supra fusco-rufæ, anticæ striga transversa obscuriore versus basim, ocello parvo vitreo medio; striga tenui nigricante dentata pone medium fasciaque lata transversa subcinereo-fusca utrinque dentata, margine externo parallela apiceque subcinereo; posticæ basi pallide subcinereo, in medio circulo magno incompleto nigro, oculum rufo albo nigroque variegatum includente; fascia fusca submarginali extus linea subdentata terminata.

Saturnia Lola, *Westw. Cab. Orient. Ent.* 25, pl. 12, f. 3.

Silhet.

17. Antheræa Zuleika.

Mas. *Alæ supra fulvo-rufæ, versus basim purpureo parum coloratæ singuluque ocello parvo vitreo ornata; anticæ falcatæ, striga undata fere obsoleta ante medium alteraque fere recta plumbeo-nigra postica; posticæ strigis duabus plumbeo-nigris, una ante, altera pone medium, hac undata minusque distincta.*

Saturnia Zuleika, *Westw. Cab. Orient. Ent.* 25, pl. 12, f. 1.

Silhet. Assam.

Australia.

A. Alæ cervinæ.
  A. Alarum fasciæ non undulosæ.
    a. Alæ posticæ ocello rotundo. - - - Helena, *White.*
    b. Alæ posticæ ocello oblongo. - - Astrophela, *Walk.*
  B. Alarum fasciæ undulosæ. - - - - Janetta, *White.*
B. Alæ flavæ. - - - - - - - simplex, *Walk.*

Group 1.

Corpus robustum. Antennæ thoracis longitudine. Alæ longæ, ...llatæ, mediocriter latæ; anticæ apud costæ apicem convexæ. ...as. — Antennæ latissime pectinatæ, apice subpectinatæ; rami ...liati, duplicati, æqualiter longi. Alæ anticæ falcatæ, margine exteriore concavo perobliquo; posticæ abdomen longe superantes. *Fœm.*—Antennæ subpectinatæ, ramis alternis brevissimis. Abdomen crassum. Alæ anticæ non falcatæ, margine exteriore recto obliquo; posticæ abdomen sat longe superantes.

Antennæ as long as the thorax. Body stout. Wings long, moderately broad; each with an ocellus. Fore wings convex towards the tip of the costa. *Male.*—Antennæ very deeply pectinated; branches of equal length, ciliated, in pairs, the six apice pairs very short. Abdomen stout, extending to three-fifths of the breadth of the hind wings. Fore wings falcate, concave and very oblique along the exterior border. *Female.*—Antennæ slightly pectinated; branches alternately longer and shorter. Abdomen very stout, extending to beyond two-thirds of the breadth of the hind wings. Fore wings not falcate; costa less convex than that of the male; exterior border straight, oblique.

18. Antheræa Helena.

Rufo-cervina; thorax antice albidus; alæ testaceo marginatæ; anticæ bifasciatæ et trimaculatæ, apud costam canæ, fascia interiore rufescente, exteriore albida marginibus fuscescentibus, macula 1a subcostali nigra cyaneo marginata, 2a subpurpurea subapicali, 3a rufa apicali, ocello vitreo, purpureo rufo albo fuscoque marginato albidoque fasciato; posticæ fasciis duabus fuscescentibus, 2a extus albido marginata, ocello luteo extus nigro anticeque cyaneo, gutta centrali vitrea minima.

Saturnia Helena, *White, Ann. and Mag. Nat. Hist.* xii. 344, 7.

Reddish fawn-colour, paler beneath. Thorax whitish in front. Wings with testaceous borders. Fore wings hoary along the costa, with a dislocated reddish band near the base, and with a whitish exterior band, which has brownish borders, and extends from near the tips to beyond the middle of the interior border; ocellus red, encircled with white and pale brown, and with a whiti across the centre, which is vitreous, with a purplish border; subapical spot and a red apical spot, the former accon towords the costa by a black blue-bordered spot. Hind wing an indistinct brownish band near the base, and with a brown terior band, which has a whitish border on the outer side; o luteous, with a broad black border, partly bordered with bl front; vitreous dot very small. *Male.*—Hind wings darker the fore wings; ocellus much larger. *Female.*—Brown part o bands of the wings much darker than that of the male; black apical spot of the fore wings much larger. Length of the b 14—18 lines; of the wings 56—68 lines.

Var. β. *Cervina ; thorax antice canus ; alæ anticæ apud costam canæ, fasciis duabus fuscis aut ferrugineis albido ex parte marginatis, maculisque duabus apicalibus, una subpurpurea rufo marginata, altera nigra cyaneo marginata, ocello rufo cingulis albis fuscisque aut testaceis et ferrugineis, gutta centrali vitrea purpureo marginata ; posticæ fasciis duabus fuscis unaque ferruginea submarginali, ocello luteo margine nigro necnon antice luteo.*

Fawn-colour, paler beneath. Thorax hoary in front. Fore wings hoary along the costa, with a dislocated brown band near the base, bordered with white on the inner side, and especially so in front; a brown exterior band, which extends from near the tips to beyond the middle of the interior border, and has occasionally a whitish border on the outer side; ocellus pale red, encircled on one side with white and brown, and on the other with testaceous and ferruginous; in its centre a vitreous dot, with a purplish border; a lilac apical spot, mostly bordered with red, and accompanied towards the costa by a black blue-bordered spot. Hind wings with a brown band near the base, and with a dark brown exterior band and a ferruginous submarginal band; ocellus luteous, more or less larger than that of the fore wings, bordered with black, and in the front with blue. The brown exterior is variable as to its distance from the ocellus. Length of the body 12—14 lines; of the wings 44—54 lines.

Var. γ. Reddish fawn-colour; bands of the wings ferruginous; exterior band of the hind wings somewhat undulating.

Var. β may be distinguished from *var.* *a* by its colour, by the [illegible]lique exterior border of the fore wings, and by the exterior [illegible] the fore wings, which is nearer the ocellus, by the more [illegible]ore wings of the male, and by the narrower fore wings of [illegible]ale.

[illegible]Australia. From Mr. Stevens' collection.
[illegible]ralia. Presented by His Excellency Capt. Grey.
[illegible]ustralia. Presented by Major-Gen. Hardwicke.
[illegible]Australia. Presented by J. Hunter, Esq.
[illegible]stralia? Presented by Capt. Sir E. Horne.
[illegible]wan River. Presented by Sir J. Richardson.
[illegible]an Dieman's Land. Presented by Morton Allport, Esq.
n. Van Dieman's Land. Presented by R. Butler, Esq.
p. Australia. Presented by H. G. Harrington, Esq.
s. Van Dieman's Land. Presented by Dr. Sinclair.
Van Dieman's Land. From Mr. A. J. Smith's collection.

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